



Environmental spaces

a geopolitics of environmental interdependence in the Baltic Sea area

Larsen, Henrik Gutzon

Publication date:
2005

Document Version
Publisher's PDF, also known as Version of record

[Link to publication from Aalborg University](#)

Citation for published version (APA):

Larsen, H. G. (2005). *Environmental spaces: a geopolitics of environmental interdependence in the Baltic Sea area*. Institute of Geography, Copenhagen University. Geographica Hafniensia. Skrifter A No. A13

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal -

Take down policy

If you believe that this document breaches copyright please contact us at vbn@aub.aau.dk providing details, and we will remove access to the work immediately and investigate your claim.



Henrik Gutzon Larsen

ENVIRONMENTAL SPACES
A Geopolitics of Environmental Interdependence
in the Baltic Sea Area



SKRIFTER - GEOGRAFISK INSTITUT - KØBENHAVNS UNIVERSITET
GEOGRAPHICA HAFNIENSIA A13
PUBLICATIONS - INSTITUTE OF GEOGRAPHY - UNIVERSITY OF COPENHAGEN

Henrik Gutzon Larsen

ENVIRONMENTAL SPACES
A Geopolitics of Environmental Interdependence
in the Baltic Sea Area



SKRIFTER - GEOGRAFISK INSTITUT - KØBENHAVNS UNIVERSITET

GEOGRAPHICA HAFNIENSIA A13

PUBLICATIONS - INSTITUTE OF GEOGRAPHY - UNIVERSITY OF COPENHAGEN

© 2005 The Author

Ph.D. thesis submitted to the Institute of Geography, University of Copenhagen

Evaluation Committee:

Associate Professor Stefan Anderberg (chair)
Institute of Geography, University of Copenhagen.

Professor Jouni Häkli
Department of Regional Studies and Environmental Policy, University of Tampere.

Senior Researcher Pertti Joenniemi
Danish Institute for International Studies, Copenhagen.

This publication is published and distributed by:

Institute of Geography
University of Copenhagen
Øster Voldgade 10
DK-1350 Copenhagen K

Telephone: +45 35 32 25 00
Telefax: +45 35 32 25 01
E-mail: info@geogr.ku.dk

The price of one copy is DKK 60 exclusive postage and tax.

The views expressed in this publication are those of the author. They do not necessarily represent the view of the Institute of Geography.

ISSN 0908-6625
ISBN 87-87945-70-3

Contents

Contents	1
Figures and Tables	3
Abstract	4
Resumé	5
Introduction	7
 Chapter 1	
Environmental Interdependence	11
1.1 Political spaces	12
1.2 Environmental spaces	21
1.3 Environmental interdependence	31
 Chapter 2	
Approaching Environmental Interdependence	37
2.1 Solving problems through institutions	40
2.2 The critical assessment of political space	51
2.3 Environmental interdependence as geopolitics	56
 Chapter 3	
An Ailing Sea Between East and West	65
3.1 An ailing sea	66
3.2 Between East and West	72
3.3 Negotiating space	76
3.4 ‘Collaboration beyond national frontiers’	85

Chapter 4	
Scaling Environmental Spaces	94
4.1 The politics of discursive closure	95
4.2 The politics of spatial enclosure	102
4.3 The social construction of what?	110
 Chapter 5	
‘The Baltic Sea – Our Common Sea’	116
5.1 In the interim	116
5.2 The Helsinki Commission goes ashore	122
5.3 ‘The Baltic Sea – Our Common Sea’	133
 Chapter 6	
Regionalising Environmental Spaces – of Inclusion	141
6.1 Environmental Regionalisation	142
6.2 Environmental boundaries of inclusion	152
 Conclusions	159
 Appendix: Translated quotations	162
References	164

Figures

1.1	Dominant views of sovereignty as a principle governing relations between states and of the territorial structure of the state, as seen from the core of the state system.	19
1.2	Indicators of some governmental and intergovernmental environmental activities, 1870–1990	24
1.3	‘Earthrise’ and ‘Whole Earth’	31
1.4	Environmental interdependence in the Baltic Sea area: state boundaries and the catchment area.	33
1.5	Creeping territoriality: zones of ocean jurisdiction according to the 1982 United Nations Convention on the Law of the Sea	35
2.1	Great debates: a ‘textbook’ genealogy of international relations studies	42
3.1	Major sub-basins of the Baltic Sea	67
3.2	Distribution of salinity, days of ice cover and macrofauna species within the Baltic Sea	68
3.3	Cross section of the vertical stratification of salinity in the Baltic Sea	69
5.1	Stages in the organisational development of the Helsinki Commission	118
5.2	Focus of recommendations adopted by the Helsinki Commission, 1980–1996	121
5.3	The Helsinki Commission goes ashore: catchment area and ‘hot spots’	131
5.4	Jumping scale? The ‘air catchment area’ of the Baltic Sea as represented by the Coalition Clean Baltic.	140

Tables

3.1	Multilateral agreements with significant sections on the environment	72
5.1	Focus of recommendations adopted by the Helsinki Commission, 1980–1996	120
5.2	Key elements and estimated costs of the JCP	130

ABSTRACT

Henrik Gutzon Larsen

Environmental Spaces: A Geopolitics of Environmental Interdependence in the Baltic Sea Area

Geographica Hafniensia A13, 2005

Keywords: Baltic Sea, environment, politics, ecosystem, scale, region, boundaries

Using the development of intergovernmental environmental cooperation in the Baltic Sea area as a concrete example, the aim of this study is to explore how the 'environment' in situations of environmental interdependence is identified and institutionalised as political-geographical objects. 'Environmental interdependence' is to this end conceptualised as a tension between 'political spaces' of discrete state territories and 'environmental spaces' of spatially nested ecosystems. This tension between geographies of political separateness and environmental wholeness is the implicit or explicit basis for a large and varied literature. But in both its critical and problem-solving manifestations, this literature tends to naturalise the spatiality of environmental concerns: environmental spaces are generally taken for granted. On the suggestion that there is a subtle politics to the specification of environmental geographies, the study therefore proposes a critical geopolitics of environmental spaces. Three propositions are in this respect advanced. First, it is proposed that environmental spaces are identified through the establishment of 'environmental enclosures', which situate environmental concerns as geographical objects for perception and action. But because of the spatial ambiguity of ecosystems and ecosystem-thinking, such enclosures are not simply facts of nature; rather, at the intersection between material realities and metaphorical representations, they are produced, reproduced and contested through political processes of scaling. Second, the study proposes that environmental spaces in practical politics can be institutionalised as 'environmental regions', which are conceptualised as dynamic socio-spatial entities. Finally, it is proposed that the boundaries produced during the enclosure and regionalisation of environmental spaces are 'boundaries of inclusion' in the sense that they establish a socio-spatial identity around environmental concerns, which does not have an 'Other' as their necessary antipode.

RESUMÉ

Henrik Gutzon Larsen

Miljørum: En geopolitisk analyse af gensidig miljømæssig afhængighed i Østersøområdet

Geographica Hafniensia A13, 2005

Nøgleord: Østersøen, miljø, politik, økosystem, skala, region, grænser

Med udviklingen af det mellemstatslige miljøsamarbejde i Østersøområdet som et konkret eksempel, er formålet med denne afhandling, at afsøge hvordan 'miljøet' i situationer karakteriseret ved gensidig miljømæssig afhængighed (environmental interdependence) identificeres og institutionaliseres som politisk-geografiske objekter. Med dette for øje, bliver 'gensidig miljømæssig afhængighed' begrebsliggjort som en spænding mellem 'politiske rum' af adskilte statsterritorier og 'miljørum' af geografisk indlejrede økosystemer. Denne geografiske spænding mellem politisk adskillelse og miljømæssig helhed er det implicitte eller eksplicitte grundlag for en omfangsrig og varieret litteratur. Men i både sine kritiske og problem-løsende udtryk, er denne litteratur tilbøjelig til at naturalisere miljøspørgsmåls geografi: miljørum tages generelt for givet. På baggrund af en antagelse om, at der indgår en diskret politik i specificeringen af miljøspørgsmåls geografi, foreslår afhandlingen derfor en kritisk geopolitisk analyse af miljørum. Tre forslag bliver i den forbindelse fremsat. For det første bliver det foreslået, at miljørum identificeres gennem etableringen af 'miljømæssige aflukker', der stedfæster miljøspørgsmål som geografiske objekter for erkendelse og handling. På grund af den rumlige tvetydighed forbundet med økosystemer og økosystem-tænkning, er sådanne aflukker imidlertid ikke blot naturlige kendsgerninger; i spændingsfeltet mellem den materielle virkelighed og metaforiske repræsentationer, bliver de snarere produceret, reproduceret og bestridt i politiske skala-processer. For det andet foreslår afhandlingen, at miljørum i praktisk politik kan blive institutionaliseret som 'miljøregioner', der begrebsliggøres som dynamiske socio-geografiske enheder. Endelig bliver det foreslået, at de grænser, der trækkes under aflukningen og regionaliseringen af miljørum, er 'inklusive grænser' i den forstand, at de i forhold til bestemte miljøspørgsmål etablerer en socio-rumlig identitet, der ikke har en 'Anden' som sin nødvendige modsætning.

Introduction

It caused some political excitement when the Israeli ministry of agriculture in August 1990 took out a full-page advertisement entitled 'The question of water – some dry facts' in several international newspapers. In the advertisement the ministry began by noting that Israel suffered from an extreme scarcity of water resource, and that water in many ways was the limiting factor for the country's development. Moreover, it was stressed that a substantial proportion of Israel's water supply derived from subterranean aquifers affected by activities on the occupied West Bank. Therefore, the advertisement went on to argue at length, Israel's water supply would be severely threatened if the state were to relinquish its territorial control over the West Bank. A final point and a framed conclusion drew out the conclusion:

It is difficult to conceive of any political solution consistent with Israel's survival that does not involve complete, continued Israeli control of the water and sewage systems [on the West Bank] ... It is important to realize that the claim to continued Israeli control over Judea and Samaria [the West Bank] is not based on extremist fanaticism or religious mysticism but on a rational, healthy and reasonable survival instinct. (Quoted from a reproduction of the advertisement in Wolf 1995: 233-234)

It does not take much by way of textual deconstruction to grasp that the advertisement was not simply driven by concern for Israel's water supply. And the sub-text becomes plain to see when it is remembered that the minister of agriculture at the time was Rafael Eitan, the leader of the small Tzomet party, which ranked an annexation of the West Bank at the top of its political agenda. The qualified suspicion was, therefore, that Eitan used the water issue – not to mention public funds and the ministry's prerogative as the regulator of water resources in Israel – to further party-political ends. And, of course, this plunged the advertisement right into the wider Israeli-Palestinian conflict. On a more abstract level, however, the advertisement also contains elements that have repercussions beyond that particular conflict.

In the first place, the Israeli ministry of agriculture's advertisement evoked a concrete situation of what this study more generally will discuss as 'environmental interdependence'; that is, in short, a tension between two very different world-views: on the one hand, a view of the world divided into discrete political territories and, on the other, antipodal visions of the Earth as made up of spatially nested and intensely interrelated ecosystems. In the geohistorical context of the advertisement, this tension involved the geographical extent of the aquifers between Israel and the West Bank and the possibility of them being politically divided between Israeli and Palestinian

territorial authority. But this at heart spatial tension between ‘environmental spaces’ of wholeness and ‘political spaces’ of separateness is, one way or another, a feature of virtually all practical and abstract engagements with large-scale environmental politics. Understood as a spatial tension between two radically different world-views, the notion of ‘environmental interdependence’ is the conceptual starting point for the present study.

Second, by raising the spectre of environmental interdependence, the advertisement not only evoked a tension between two notions of space, it actively if tacitly construed those spaces. In the vocabulary of contemporary geography, we could say that the ministry ‘spatialised’ a set of distinct political and environmental geographies, and it was in this respect particularly the advertisement’s political geography of continued Israeli control over the West Bank that kicked up trouble. Usually, however, governmental and intergovernmental politicians and officials will seek remedies for situations of environmental interdependence within existing territorial structures, and a host of ‘problem-solving’ scholars have offered their help to such endeavours. Activists and ‘critical’ scholars, on the other hand, are likely to point out that large-scale environmental issues undermine state-territorial notions of politics. And as often as not, they will call for radically new political geographies in which state-territorial politics is sent packing to the dustbin of history or, at the very least, pushed to the back of environmental politics.

This study is ‘critical’ in the sense that it seeks to question what is usually taken for granted, the existing order of things. For the present, however, I have no quarrels with the problem-solving or critical approaches to the politics of environmental interdependence, which, of course, can be practical as well as abstract. Rather, the aim is to draw attention to the politics involved in the spatialisation of the environment as an object for politics. The environmentally-excused expansionism of the ministry of agriculture’s advertisement was thus based on the assumption that the aquifers between Israel and the West Bank ‘by nature’ provided an environmental space of wholeness to which the political spaces had to be adjusted. Similar, although certainly for far more appealing ends, both problem-solving and critical approaches to the politics of environmental interdependence habitually build their very different political analyses and arguments upon strikingly similar notions of taken-for-granted environmental spaces. If the spatial tension contained in the notion of environmental interdependence is the conceptual starting point for the present study, this – I dare say neglected – geopolitics of spatialising the ‘environment’ in situations of environmental interdependence is its substantive focus.

I first became aware of this geopolitical dimension of environmental politics in my master’s dissertation on water resources in Arab-Israeli politics, which has inspired the introductory vignette. But I will in the present study pursue the issue in the more amicable – and probably also more ‘representative’ – context of the Baltic Sea. Using the development of environmental cooperation in the Baltic Sea area as a concrete example, the aim of this study is thus to explore the question: *How is the*

'environment' in situations of environmental interdependence identified and institutionalised as political-geographic objects?

To set the stage for this exploration, *Chapter One* provides an introduction to the tension between the 'political' and 'environmental' spaces that constitute the notion of environmental interdependence. The two sides of this tension are first introduced in separate sections, which respectively delineate the modern vision of a world formed of territorial states and the view of nature as consisting of spatially nested ecosystems. These fundamentally different world-views are then in the final section of the chapter brought together to provide an opening for the following discussions of the politics of environmental interdependence. From this, *Chapter Two* moves on to outline how the politics of environmental interdependence has been approached from two radically different positions in the existing literature. This requires some detours into the realm of theory, notably that of international relations studies where much of the literature is to be found. Yet the primary purpose is not to engage in theoretical debates, let alone criticism. Rather, the aim is to illustrate the tendency of the existing literature to naturalise the spatiality of the environmental facet in the tension between environmental and political spaces. This is the theme of the final section of the chapter, which introduces my proposal for a critical geopolitics of the spatialisation of the environment in situations of environmental interdependence.

Alternating between concrete analyses and abstract discussions, the purpose of the remaining chapters is to put flesh on this proposal. To this end, *Chapter Three* starts with an outline of the marine environment in the Baltic Sea as it appeared round about 1970 when it first caught the attention of the Baltic Sea governments. But the bulk of the chapter deals with the first attempts to establish a measure of intergovernmental cooperation on the marine environment of the Baltic Sea, which, after some barren attempts, eventually resulted in the 1974 Helsinki Convention. Using key elements from that part of the concrete analysis, *Chapter Four* then presents the first step in the abstract discussion of the geopolitics of environmental interdependence. Taking its cautious prompt from constructionists' arguments on the discursive nature of environmental politics, which are linked to the critical investigation of scale in recent geography, the aim is to argue that the geopolitics of environmental interdependence in part is about the scaling of environmental issues. This process of scaling serves the critical task of establishing an 'environmental enclosure' – a scalar fix, which temporarily situates an environmental problem and makes it a geographical object.

Chapter Five picks up on the history of environmental cooperation in the Baltic Sea area, which is followed from 1974 until the signing of the revised Helsinki Convention in 1992. For long this was a period of few tangible environmental results. Yet in the late 1980s the cooperation gathered momentum when the participating governments slowly accepted more substantial environmental commitments, which eventually were codified in the 1992 convention. Significantly, this also involved a re-scaling of environmental cooperation in the Baltic Sea area. This paves the way

for *Chapter Six*, which rounds off the abstract part of the study. In the first place, this involves an argument on the institutionalisation of ‘environmental regions’, which extends on the previous discussion of scale. Second, as a provisional capstone, the chapter turns to a discussion of the politics of the boundaries produced in the scaling and possible regionalisation of environment spaces.

Chapter One

Environmental Interdependence

‘The Earth is one but the world is not’ was the charged maxim used by the Brundtland Commission to open its report on *Our Common Future* to the general assembly of the United Nations. ‘We all depend on one biosphere for sustaining our lives’, the report continued by way of explanation. ‘Yet each community, each country, strives for survival and prosperity with little regard for its impact on others’ (WCED 1987: 27). In these concise sentences, the Brundtland Commission managed to convey what scholars of world politics – one way or another, but usually less poetic – would describe as a tension between the boundary-transcending nature of many environmental concerns and the notion of territorial sovereignty. Camilleri and Falk have provided an exemplary explicit description of this tension:

On the one hand we have a conception of a world divided into separate, independent communities, delineated clearly in time and space, governed by their own sovereign authority and system of law. On the other hand is a conception of a physical, ecological and social totality, a single community of humans and other species, ultimately governed equally by natural law. (Camilleri and Falk 1992: 172)

Mostly at the scale of the Baltic Sea area, it is the political geography of this tension between political fragmentation and environmental wholeness, which in the guise of ‘environmental interdependence’ is the conceptual starting point of this study.

To set the stage, this chapter provides an introduction to the notion of environmental interdependence, which is conceptualised as a tension between two radically different world-views: on the one hand, the ‘political spaces’ associated with the modern view of the world as made-up of discrete sovereign territories and, on the other, the ‘environmental spaces’ related to the view of nature as consisting of spatially nested ecosystems. The two sides of this tension are first introduced in separate sections, emphasising the spatial underpinnings of both, while the third section turns to the notion of environmental interdependence itself. This introduction is deliberately guarded, partly because the topics all too easily swell to unnecessary proportions, but mainly because a central aim of this study is to point out that situations of environmental interdependence are not naturally givens. This is something to which we will return in Chapter 2, which on the basis of a discussion of existing approaches to the politics of environmental interdependence introduces the argument and approach pursued in the rest of the study. Before proceeding, however, I find it necessary briefly to address three somewhat pedantic points on my use of the term ‘environmental interdependence’.

First, it should be noted that my use of the term ‘environmental’ is pragmatic rather than conceptually subtle. Dobson (2000) argues that one should distinguish between managerial ‘environmentalism’ and radical ‘ecologism’, where the former is sufficiently nonspecific to be hybridised to most ideologies while the latter is an ideology in its own rights. I take this as an important distinction in discussions of ‘green’ political thought and as a reminder that we should be careful in our use of terms. Any study of politics must reckon with ideology, of course. But my primary concern is not with the theory of green political thought as such, and much of the abstract and certainly the concrete ground covered in the thesis is in any case squarely within the scope of what Dobson recognises as ‘environmentalism’. My description of the Baltic Sea as an emerging ‘environmental region’ has for example nothing to do with the radical – and highly problematic – ‘bioregionalism’ found in some green political thought (Frenkel 1994). This is one reason why I primarily use the term ‘environment’. When I occasionally use the term ‘ecology’ and its various derivatives, it is as reference to scientific rather than political ecology, although the distinction admittedly at times can be difficult to uphold in practice.

My second point concerns the notion of ‘interdependence’. Interdependence was once a fashionable buzzword in international relations studies (Andersen 1991), but the concept is nowadays a little mouldy and has to some extent been replaced by other terms, most notable the notion of ‘globalisation’. Yet I will stick to the concept. This should not be interpreted as an affiliation with the ‘interdependence school’ in international relations studies epitomised by Keohane and Nye (2001). Rather, I use the concept because it is the most accurate available description of the problem I address and, as we shall see, because the concept has reverberation in both international relations studies and ecology.

Finally, one should not make a fetish of ‘environmental interdependence’. In my usage, environmental interdependence describes a condition – the spatial tension between environment and sovereignty. Practitioners and scholars may describe this condition using other terms, but it is the spatial tension evoked rather than the term applied that is important to my concern.

1.1 Political Spaces: A World of Sovereign Territories

At the dawn of the twentieth century, Mackinder (1904) made a place for himself in the history of political geography when he proposed that the ‘Columbian epoch’ had come to an end. In contrast to the Middle Ages, where ‘Christendom was pent into a narrow region and threatened by external barbarism’, the Columbian epoch had for Mackinder been characterised by the ‘expansion of Europe against almost negligible resistance’. But in the post-Columbian age, Mackinder noted with some anxiety for his seafaring Britain, ‘we shall again deal with a closed political system, and none the less that it will be one of world-wide scope’ (Mackinder 1904: 422).

Mackinder's eurocentrism, to mention nothing more sinister, is evident and need not detain us in the present context. But Mackinder was on to something when he claimed that the world had become a 'closed political system' by the early twentieth century, although he and his contemporaries hardly could have imagined the qualitative metamorphosis that would befall this system during the decolonisation some fifty years later. What Mackinder recognised was in fact the first phase in the global dissemination of the modern state-system, which, arguably, can be seen as one of the first features in the process of 'globalisation'. (The irony is, of course, that much of the current debate on globalisation revolves around the alleged dislocation of processes and phenomena from the very same system of states.) The development of the modern state-system should nowadays be common knowledge for anybody with an academic interest in world politics. Therefore, I will restrict my exposition to the bare minimum needed for the present purpose, focussing on the concept of sovereignty and its link to territoriality.

Notions of Sovereignty

Many contemporary scholars would for epistemological reasons shy off from defining a notion like sovereignty. Leaning on Nietzsche, Bartelson has thus in his otherwise Foucaultian treatise on the meaning of sovereignty emphasised that 'only that which has no history can be defined; to start a history of sovereignty with a definition of the term sovereignty would be to subject its historicity to the sovereignty of the present' (Bartelson 1995: 13). I favour this critical approach to concepts. Yet for the present purpose it does no harm to recognise that many contemporary scholars and most political practitioners operate with a more or less explicit notion of sovereignty, which, 'simply put, means self-government. It requires denial of any higher political authority, and the claiming by the state of supreme decision-making authority both within its territory and over its population' (Buzan 1991: 67).

This is the *formal* or *de jure* understanding of sovereignty, which is the bedrock of international law and is canvassed by some scholars of politics (e.g. James 1999). So it seems appropriate to call upon a textbook definition of sovereignty from the realm of international law:

Sovereignty is the most extensive form of jurisdiction known in international law. In general terms, it denotes full and unchallengeable power over a piece of territory and all the persons from time to time therein. It may be subject to certain limitations, such as guarantees of human rights and diplomatic privileges, but apart from those exceptions that are positively established, a state's sovereignty over its territory is *absolute and complete*. (Dixon 1990: 79, italics added)

This is essentially the view inscribed into the Charter of the United Nations, which in Article 2(1) state that 'The Organization is based on the principle of the sovereign equality of all its Members'. The Charter does not include a definition of sovereignty,

something that can serve as an indication of the extent to which sovereignty is regarded as a given in contemporary politics. But the ensuing principles of the Charter suggest some of the meaning. Article 2(4) thus declare that ‘All Members shall refrain in their international relations from the threat or use of force against the territorial integrity and political independence of any state’, while Article 2(7) note that ‘Nothing in the Charter shall authorise the United Nations to intervene in matters which are essentially within the domestic jurisdiction of any state or shall require the Members to submit such matters to settlement under the present Charter’. Recalling that the United Nations in spite of its name is a club of states, this principle of non-intervention in domestic affairs also applies unilaterally between states.

From the formal point of view, then, the concept of sovereignty involves nominal equality between states, territorial integrity and political independence, and immunity from intervention in domestic affairs. This will usually entail a sharp distinction between a domestic ‘inside’ under the absolute sovereignty of states and an ‘outside’ without any formal authority, which has led many international relations scholars to regard inter-state politics as ‘anarchical’: ‘Since the claim of sovereignty automatically denies recognition of any higher political authority, a system of sovereign states is by definition politically structured as an anarchy’ (Buzan 1991: 21).¹ But central to the formal understanding of sovereignty is the view that sovereignty is an absolute and complete category, which Sørensen (1997) has illustrated by likening sovereignty to matrimony: one is either married or unmarried, and states are similarly either fully sovereign or not sovereign at all; a state cannot inform the United Nations that it from now on is, say, eighty per cent sovereign.

In contrast, if we stick to the basics, we find the *actual* or *de facto* understandings of sovereignty. Sovereignty is in these understandings a relative concept, which, for example, can vary according to substantive elements of state power, the capacities and practices of state and, indeed, the meanings attached to the concept. For some, sovereignty is thus something that can be split into different substantive elements, which in turn can be lost, eroded or even ceded. This view is frequent in current debates on globalisation, where states for example are seen to be losing ‘economic sovereignty’ to trans-territorial actors and forces (Sassen 1996). Taylor (1994) provides an eloquent example of this approach when he on the basis of Giddens’ (1985) description of the nation-state as a territorial ‘power container’ discusses the extent to which the different ‘containers’ – military power, economic wealth, cultural identity and social security – are ‘leaking’.

Another understanding focuses on sovereignty as a coherent concept, which, nonetheless, is relative in relation to the capacities and practices of states. Jackson

1. The emphasis on the allegedly ‘anarchical’ nature of inter-state politics is a central feature of the conventional branches of international relations studies (Section 2.1). The inside/outside dichotomy of this assumption has been the target of considerable criticism (Walker 1993; Agnew 1994), and so has the assumption about ‘anarchy’ itself (Wendt 1992). I share this criticism, but my present aim is primarily to outline the conventional understanding of the sovereignty state-system and I will therefore at times indulge in distinctly untrendy modes of dichotomous reasoning.

(1990) has in this respect provided a well-known example in his discussion of 'negative' and 'positive' sovereignty. Negative sovereignty, Jackson argues on the basis of Isaiah Berlin's ideas of liberty, involves legal independence and immunity from outside interference or intervention; it is the passive 'freedom from', which is the essence of the formal view of sovereignty. Positive sovereignty, on the other hand, is a substantive rather than formal condition involving capacities to act; it is the active 'freedom to'. Positive sovereignty is thus a relative and changing condition that depends on the actions and resources of governments and their populations. Such capacities are a distinctive feature of many 'developed' states, whereas many post-colonial states in Jackson's terminology are 'quasi-states' because they lack the positive sovereignty to act. Litfin (1997) pursues a similar approach to sovereignty in relations to the politics of environmental interdependence when she argues that states rather than 'ceding' sovereignty typically engage in 'sovereignty bargains' involving trade offs between three constituting elements of sovereignty: autonomy (independence), control (ability to produce an effect) and legitimacy (recognised right to make rules).

Finally, we find views of sovereignty, which are so radical in their relative understanding of the concept that is slightly misleading to include them under the heading 'actual'. Considering that proponents of this heterogeneous position usually draw on various strands of post-structuralism, it should not come as a surprise that there are as many variants of the argument as proponents. But Bartelson's (1995) treatise on the genealogy of sovereignty may serve as an example. With Foucault lurking in the background, Bartelson argues that sovereignty is implicated in the production of knowledge (and, hence, power). Therefore, 'we should avoid the direct question of what sovereignty is, and instead ask *how* it has been spoken of and known throughout a period of time, and connect the answer to this question with the question of *why* it seems so difficult to speak of and to know sovereignty today' (4). We should, in other words, question the often essentialist notions of sovereignty and instead view sovereignty as a historically contingent discourse and, in some variants of the argument, practice. Broadly speaking, this is also the line of reasoning which several political geographers in recent years have pursued in relation to the territorial element of contemporary conceptions of sovereignty (e.g. Murphy 1996).

Now, I have already in the preceding paragraphs done violence to the extensive debate on sovereignty. This, I believe, is an inescapable feature of any attempt to outline a wide-ranging body of literature, which has consequences for the way I address the literature on the politics of environmental interdependence in the next chapter. So rather than persisting in dismembering the literature on sovereignty, we better turn to the central topic of this subsection. For whatever the particular approach to sovereignty, they all relate to, or strives to problematise, the formal understanding of contemporary sovereignty. But this understanding is the outcome of a geographically situated history, which is closely intermeshed with the develop-

ment of the modern state and the inseparable ‘Westphalian’ state-system, and has lead to what Agnew (2003) terms the ‘modern geopolitical imagination’.

Territorial States and the Westphalian System of States

Even in a very long perspective, history is strewn with examples of how humans by force or consent have converged in political organisations that in various respects approximate the modern state (Mann 1986). Tilly (1992) estimates, for example, that Europe – for this is initially a European history – around year 1500 was divided into some two-hundred ‘states, would-be states, statelets, and statelike organizations’ (42). Depending on the definition, however, Tilly recognises that the number of such units can range from eighty to five-hundred ‘formally autonomous European political entities’ and admits that his estimate is an arbitrarily taken median (45). The exact number of state-like entities is not decisive. But Tilly’s wide range for counting highlights that even in the late Middle Ages, Europe was if anything characterised by an astonishing diversity of political authorities that defies a modern urge to enumerate and, indeed, to map; medieval Europe was a patchwork of overlapping and incomplete rights of government, which abounded with geographically interwoven and stratified legal systems, plural allegiances and anomalous enclaves (Ruggie 1993).

To be sure, medieval Europe might have encompassed political entities that in some respects resemble the modern state as a political organisation; what was missing was the modern conception of sovereignty as a socio-political institution. If one can speak of ‘sovereignty’ in medieval Europe, the sovereign was God whose command generally was acknowledged by Christians as demanding obedience. In the second instance it was the Pope, God’s representative on earth, who nominally presided over a loosely knit religious-political community, *respublica Christiana*, encompassing all social and political jurisdictions of Latin Christendom (Jackson 1999). If one can speak of sovereignty in the Middle Ages, then, it was as a universal principle in the sense that it was singular and knew no boundaries but the fuzzy frontiers of Christendom. In contrast, sovereignty is in the modern conception seen as a plural principle, which is the exclusive property of a territorial state in a collective of notionally equal states; in the words of Taylor, it ‘is the bringing together of territory and sovereignty which provides the legal basis of the modern inter-state system’ (Taylor 1993: 157).

Scholars once quarrelled whether this medieval-to-modern transition in political life primarily was driven by developments in the technics of warfare or by economic forces, a debate some influential analysts have sought to solve by emphasising both or even additional factors (Giddens 1985; Mann 1986; Tilly 1992. For an account of this debate in political geography, see Driver 1991). Whatever the underlying reasons, however, we only need to acknowledge that Europe during the age of absolutism – roughly from about 1500 to 1800 – saw the emergence of a novel political order.

The theory of absolutism operated at some distance from reality. Yet it is possible to discern certain general characteristics (Giddens 1985). First and probably foremost, absolutism involved the eradication of rival powers within the emerging states that resulted in a pyramidal structure with the sovereign monarch as the symbolic apex. Political power was, in other words, centralised into an evolving state bureaucracy, which in turn expanded its 'surveillance' – that is, 'the collation of information used to co-ordinate social activities of subordinates, and the direct supervision of the conduct of these subordinates' (Giddens 1984: 127). Second, this allowed for the promulgation of abstract codes of law that applied to the whole population of the state. Finally, absolutism saw the emergence of a new mode of fiscal management, the tax state, which permitted the development of separate state bureaucracies and the mounting of standing military forces under direct command of the state. But crucial to these and other developments of absolutism was a new territorial order in which scattered clusters of provinces and overlapping spaces of authority were realigned into singular and coherent state territories, which were furnished with demarcated borders rather than the fuzzy frontier zones that had characterise the medieval order.

This process of political centralisation and territorial consolidation was highly uneven and diverse, of course. Yet it is fair to say that Western Europe during the age of absolutism saw the emergence of the embryo to the political organisation we may recognise as the 'modern state'. Leaning on Max Weber, Mann provides a useful definition of this organisation:

1. The state is a differentiated set of institutions and personnel
2. embodying centrality, in the sense that political relations radiate to and from a center, to cover a
3. territorially demarcated area over which it exercises
4. some degree of authoritative, binding rule making, backed up by some organized physical force. (Mann 1993: 55)

The centrality of territoriality in this definition has made Mann's work a popular point of reference in political geography. And the territorial element is important. For one thing, the territoriality of the state has proved a highly efficient strategy to capture and mould important social processes (Häkli 1994; Taylor 1994; Murphy 1996). In fact, with the modern notion of private property, the modern state is arguably the most clear-cut example of the power-political utility of the strategy of human territoriality (Sack 1986). But the territoriality of the modern state also points towards the other key feature of modern political life. For the absolute territoriality of the state is premised upon a system, which – in principle – recognises the equal territoriality of other states. Without this differentiation, Ruggie argues, 'it is impossible to define the structure of modernity in international relations' that led to the 'peculiar form of sociopolitical individuation' around the state (Ruggie 1993: 152).

Scholars debate when exactly this turn in European political life took place. But we may for the present purpose, like most, look to the seventeenth century and the Peace of Westphalia (1648) for the best, if symbolic, historical reference point for the institution of the modern system of sovereign states. This system provided a solution to a problem that sprang from the absolutist centralisation and territorialisation of power. During absolutism, the state captured its territory and turned it into state property, and it captured the population of that territory as subjects and later citizens. This model of governance had no room for semi-independent territories, peoples or institutions (Jackson 1999). The power holders were, in short, sovereign. As such, what could prevent the powerful from agglomerating additional area to the point of establishing the universal sovereignty of an empire, a secular variant of *respublica Christiana*? In principle, after the Reformation had dissolved the papal authority in western Christendom, Europe had no such barrier, and the early phase of absolutism was indeed marked by bitter wars of acquisition. The Peace of Westphalia settled one of these more or less continental wars, the bloody thirty years' war, and institutionalised a simple if ostensibly paradoxical solution to the problem of authority: to be sovereign, the state had to cede sovereignty (Harste 1994), or, more to the point: to remain territorially sovereign, the state had to surrender pretensions for universal sovereignty. A key conceptual development of modern politics was thus the conversion of sovereignty from a universal to a multiple concept (Taylor 1995).

This system of notionally equal territorial states was maintained by another novel invention, the balance-of-power, in which the great powers would team up against any pretension for hegemony. The defeat of the Napoleonic and later the Nazi bids for hegemony are prime examples of the operation of the balance-of-power principle, which, from the point of view of the core states, led to the unprecedented periods of stability during the Concert of Europe and the United Nations system. Thus, while surely not an arrangement based on fairness, a core value of the Westphalian system of states is stability (Jackson 1999). The system is at heart conservative.

The Westphalian system has evolved since the seventeenth century. Yet, like the 'internal' state structure developed under absolutism, so has the core the 'external' structure of absolutism survived to the present. This core is, in the words of Ruggie, 'the familiar world of territorially disjoint, mutually exclusive, functionally similar, sovereign states' (Ruggie 1993: 151). The development of this system was initially a distinctly European history, but with the European rush for colonial possessions, this model of organising political space into discrete territorial domains was gradually extended beyond its European cradle. And with the final colonialist assault on Africa at the end of the nineteenth century, what Davidson (1992) aptly terms the 'colonial enclosure', practically all land but Antarctica was parcelled up into clearly delimited territories under a sovereign power. This was the 'closed political system' Mackinder in 1904 evoked for his audience.

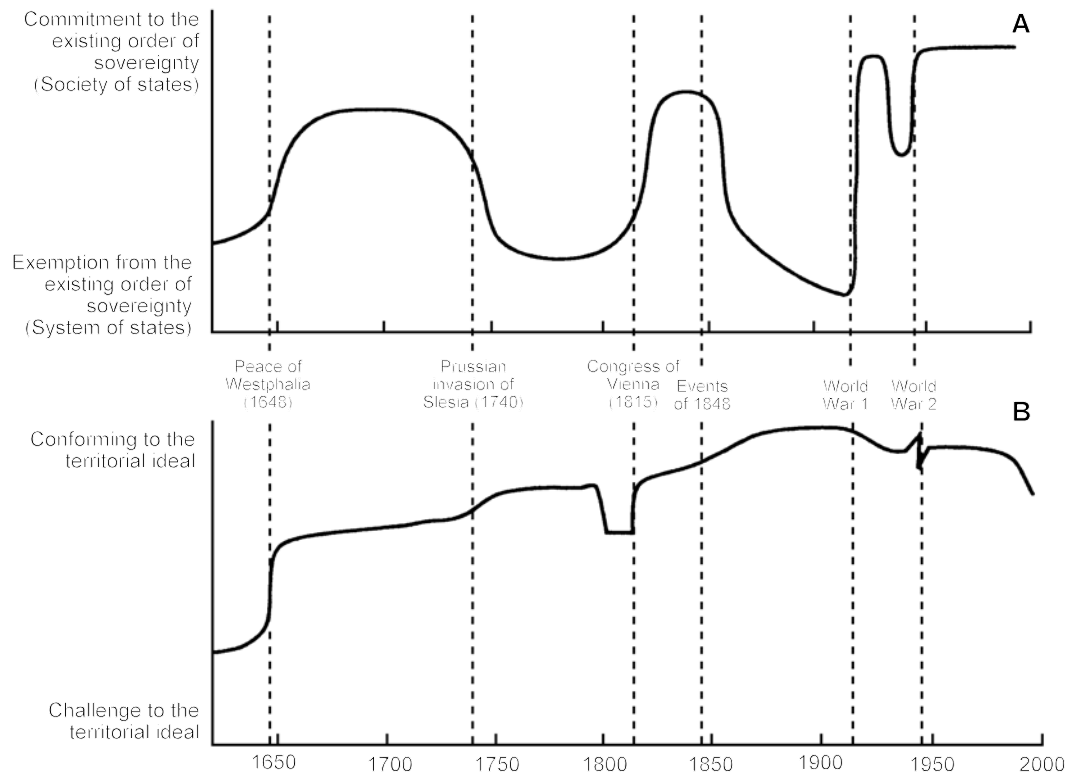


Figure 1.1 Dominant views of sovereignty as a principle governing relations between states (a) and of the territorial structure of the state (b), as seen from the core of the state system. Source: adapted from Murphy (1996).

The Modern Geopolitical Imagination

The history of sovereignty, like the parallel and inseparable histories of the modern state and state-system, is certainly far more complex than outlined over the preceding pages. Yet the notion of sovereignty that emerged from the ‘Westphalian moment’ is also seductively simple: ‘Sovereignty is like Lego: it is a relative simple idea but you can build almost anything with it, large or small, as long as you follow the rules’ (Jackson 1999: 9).

Extending on this parable, we might say that it is the ‘rules’ of sovereignty that makes it such a complex concept and social institution. At the most basic, the rules governing who rightfully can possess sovereignty have changed since the concept was tied to the absolute European monarchs. First, with the rise nationalism in Europe and the Americas from the late eighteenth century, sovereignty slowly shifted from being an attribute of the monarch to being the property of the ‘nation’ or ‘people’, possibly, but not inevitably, with democratic connotations. Second, although not necessarily with the popular let alone democratic elements, this right to national self-determination was from the middle of the twentieth century gradually extended to the peoples of the European colonies (Clapham 1999; Jackson 1999;

Mayall 1999). Also, on a more general level, rules such as what constitute an ‘intervention’ on the sovereignty of a state has change historically (Weber 1992); the emerging notion of ‘humanitarian intervention’ is in this respect a significant challenge to the Westphalian conception of sovereignty (Weiss and Chopra 1995). And in the end, of course, sovereignty is a social institution subject to the whims of its members – that is, the sovereign states (Wendt 1992). As charted in Figure 1.1a, history thus abounds with dramatic fluctuations in the extent to which states have accepted the Westphalian conception of sovereignty as the principle governing their relations. The figure is a heuristic tool, of course, and its details can certainly be debated. Yet it should illustrate the volatility of sovereignty as a principle to keep stability and order between states. Using Bull’s (1977) celebrated distinction, we could say that a fall in the curve indicates a lapse into an ‘anarchical’ *system of states*, while a rise suggests an emerging *society of states* ordered by certain common interests, values and rules.

To be sure, Bull’s discussion of a possible post-Westphalian ‘new’ Middle Age anticipates the more contemporary debate on the future of the state and the state-system (Ruggie 1993; Anderson 1996). Yet it is not without significance that ‘state’ appears in both of his contrasting world political orders. For in comparison with the wilde fluctuations in the degree to which states have accepted sovereignty as the guiding principle of their relations, the principle of territorial state itself has steadily been consolidated in the modern political order. Indeed, it could be argued that the ideal of the territorial state has been fortified in times of declining respect for the principle of sovereignty. As illustrated in Figure 1.1b, which once again is nothing more than an interpretive device, the trend has thus steadily been toward greater acceptance of a political order in which most power is vested in the discrete territorial units of states (Murphy 1996). For long, only the Napoleonic and later the fascist bids for universal sovereignty halted this trend towards the ideal of the territorial state. Picking up on Jackson’s parable from the opening of this subsection, we could say that the territorial state has become the ‘simple’ Lego cube in the complicated game of modern world politics. Indeed, as Wendt points out, the modern state-system ‘constitutes a spatially rather than functionally differentiated world – a world in which fields of practice constitute and are organized around “domestic” and “international” spaces rather than around the performance of particular activities’ (Wendt 1992: 412). Or, in the words of a less critical politic-scientific predecessor, ‘In thinking of a foreign power, what first arises in our fantasy is undoubtedly the picture of a map’ (Kjellén 1916: 20, my translation).

Thus, from a dissimilar pair of geographically sensitive political scientists, we get the essence of the ‘modern geopolitical imagination’ (Agnew 2003).² This order

2. Although Agnew probably would agree, the following qualification is of my doing. For Agnew, the ‘modern geopolitical imagination’ involves four interrelated themes: the visualisation of the world as a whole; the spatialisations of this world into regions of ‘modernity’ and ‘backwardness’; seeing territorial nation-states as the primary form of political organisation; and viewing world politics as the outcome of the pursuit of primacy between competing states.

is 'modern' because other orders have preceded it and still others may follow; it is 'imagined' because it never quite reflects the political reality; and this modern imagination is at heart 'geopolitical' because it involves a simple but powerful vision of a world divided into discrete blocks of territorial states. So powerful and ingrained is this world-view that it all too easily is taken for granted:

When schoolchildren are repeatedly shown a political map of the world which represents the particular location of named states in different continents and oceans they can easily end up regarding such entities in the same light as the physical features such as rivers or mountain ranges which sometimes delimit their international boundaries. It is nevertheless the case that not only the map itself but also the sovereign jurisdictions it represents are a totally artificial political arrangement which could be altered or even abolished. (Jackson 1990: 7)

Surely, the system of territorial states is a 'totally artificial political arrangement', and contemporary geographers, among others, have poured much intellectual labour into revealing this artificialness. Indeed, although Murphy (1996) does not explain it, one could infer that the late twentieth century dip in the commitment to the ideal of the territorial state in Figure 1.1b represents the possibility of an emerging 'post-modern' order with less emphasis on territorial states (Ruggie 1993; Anderson 1996). Yet, Agnew argues, 'the modern geopolitical imagination, though changing its emphasises as the balance of power among the Great Powers and the nature of the world economy have changed over time, still remains prevalent in framing the conduct of world politics' (Agnew 2003: 10). It was this world-view of a system of territorially discrete and sovereign states the Brundtland Commission evoked when it stated the 'world' is not one. Now it is about time to turn to the 'Earth', which the commission considered as 'one'.

1.2 Environmental Spaces: An Earth of Nested Ecosystems

The relationship between humans and nature has vexed Western thought throughout recorded history. Glacken (1967) has thus in his modern classic on the history of environmental thought identified three questions that humans persistently have asked about their relationship to the habitable earth: Is the earth, which is obviously a fit environment for humans and other organic life, purposefully made? Has its environment influenced the moral and social nature of individual human beings and molded the character of human culture? And have humans in their tenure of the earth changed it from its hypothetical pristine condition? These general ideas, Glacken argues, have dominated Western thought on the relationship of human culture to the natural environment from the time of the ancient Greeks to our own; sometimes only one has been at the fore, sometimes two or even the three ideas in combination. Yet Glacken recognises that we have to look to the end of the nineteenth century before the idea humans as environmental agents was explored in detail. George Marsh's

tellingly titled book *Man and Nature – or Physical Geography as Modified by Human Action* (1864) is in this respect by Glacken identified as a keystone in the development of modern environmental thought.

The focus of this section is the idea of humans as environmental agents. Before proceeding, however, it seems appropriate briefly to remind ourselves that the idea of ‘environmental influence’ played a significant role in early academic geography (Livingstone 1992). This mode of reasoning found its perverse climax in the environmental determinism of the late nineteenth century, which also left its heavy imprint on the nascent sub-field of political geography (Sprout and Sprout 1956; Peet 1985). Mackinder’s (1904: 422) dictum that ‘Man and not nature initiates, but nature in large measure controls’ is in this respect a well-known example of ‘mild’ environmental determinism in early geopolitical reasoning.³ Most contemporary geographers would shun even the mildest notion of environmental determinism. But such modes of reasoning have not left the stage for good and are for example discernable in those parts of the literature on ‘environmental conflicts’, which according to an influential article by Homer-Dixon (1991) try to analyse the ‘causal linkage’ between environmental change and violent conflicts (for a critical discussion of this literature, see Dalby 2002). More generally, there is also a dose of determinism in Diamond’s (1998) acclaimed but in terms of environmental influences curiously old-fashioned account of the rise of differentiated civilisations. And, of course, although contemporary environmental concerns mainly are about human influences on the environment, we should not be blind for the often tacit fear that a degraded environment in the end might be the most influential. In such assumptions on causal roles of the environment, Agnew points out, ‘It is as if the past the past one-hundred years of political geography – and all the debates over environmental determinism and the mediating roles of discourses and institutions – had never taken place’ (Agnew 2002: 157). With this reminder we can return to the question of humans as environmental agents.

Glacken is not the only who identify the second half of the nineteenth century (and Marsh’s *Man and Nature*) as the vantage point for the modern concern for the human impact on the environment (Bramwell 1989). Some discerns the roots of this concern back at least to the middle of the seventeenth century (Grove 1990). While Dobson (2000) pitches the origins of modern environmental concern to the 1960s and 1970s, although he admits this probably only counts for the radical ‘ecologism’ discussed in his book; for him, Rachel Carson’s *Silent Spring* (1962) comes close to being, but is not quite, a founding text. Whatever the precise point of origin, however, it is only within the past four decades or so that the impact of human society on

3. The notion of ‘mild environmental determinism’ is derived from what Sprout and Sprout (1956) in their classic study of human-environment theses on world politics term ‘mild environmentalism’: ‘The environmentalist, like the determinist, postulates the milieu, or more commonly the physical environment, as the active factor in the man-milieu relationship. But environmentalism, unlike determinism, provides an escape hatch. [...] they generally assume, as the strict determinist would not, that man can choose, however unwisely, to disregard the directives which Nature gives him’ (32). There is, in other words, a (small) scope for human agency.

nature has become a serious public concern. Hobsbawm could thus in the first book of his grand history of modernity capture the material essence of the Industrial Revolution in this observation:

Some time in the 1780s, and for the first time in human history, the shackles were taken of the productive power of human society, which henceforth became capable of the constant, rapid and up to the present limitless multiplication of men, goods and services. (Hobsbawm 1962/1996: 28)

Although characterising a phenomenon emerging in the late eighteenth century, this perception of the material foundations of human society was evidently still in vogue when Hobsbawm in the early 1960s formulated his analysis. Some thirty years later, however, Hobsbawm found reason to conclude his lineage of modernity with a warning that read as a reversal of his previous observation:

A rate of economic growth like that of the second half of the Short Twentieth Century [1914–1991] if maintained indefinitely (assuming this to be possible), must have irreversible and catastrophic consequences for the natural environment of this planet, including the human race which is part of it. (Hobsbawm 1994: 569)

In this manner, the writings of Hobsbawm neatly encapsulate what Lowenthal (2000) describes as a movement ‘from the conquest to the rescue of nature’ in the Western attitude to the ‘environment’. Lowenthal provides an eloquent if hard-handed critique of the mystique and catastrophic hype that often suffuse contemporary environmental concerns, for instance the second quotation from Hobsbawm. But digging into the history of environmental thought, let alone environmental political theory, opens intellectual vistas at least as wide as those relating to the question of sovereignty. So we shall again stick to the basics, and as the focus in this thesis is intergovernmental environmental cooperation, we can take that sphere as a point of departure.

Numerical accounts of political activity should be treated with caution. Yet it is a telling picture that emerges if one chart the development of some basic governmental and intergovernmental activities on environmental matters over the past century (Figure 1.2). The figure reveals that governments throughout the twentieth century have concluded treaties on environmental issues, but also that the number of such treaties until the second half of the century was very limited. Moreover, these scattered activities mainly dealt with the conservation of resources and endangered species (Ward 1998). As we will see shortly, this focus contrast with the more complex, or ecological, approach that increasingly guides environmental thinking and action. After 1945, however, the number of environmental treaties has increased dramatically, and this development has been compounded by the establishment of numerous intergovernmental environmental organisations. This impressive rise partly reflects a more general move towards multilateral action. Yet the establishment of separate environmental ministries from 1970 onward suggests a more profound

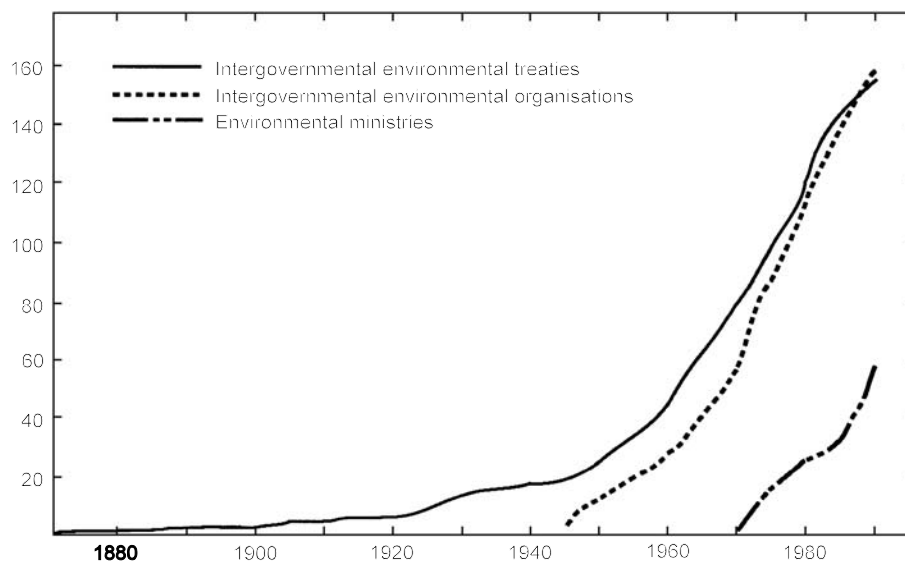


Figure 1.2 Indicators of some governmental and intergovernmental environmental activities, 1870–1990 (cumulative count). Source: Mayer et al. (1997).

change,⁴ which, of course, has been paralleled by the establishment of a multitude of nongovernmental environmental organisations (Wapner 1995). Governmental (and nongovernmental) mobilisation around environmental themes has in recent years experienced a slump. Still, although surely exaggerated, Worster (1994) is on to something when he with a phrase lent from the first Earth Day in 1970 describes the latter part of the twentieth century as the ‘Age of Ecology’.

Hannigan (1995) summarises four main explanations for the dramatic growth of environmental consciousness and action from the early 1970s. First, the *reflection* hypothesis, which holds that environmental deterioration in the industrial West reached a zenith in the late 1960s and the rise of environmental mobilisation therefore was a direct reflection of the worsening situation. Second, the *post-material* thesis that locates the rise within a more extensive shift in values among certain segments of Western societies. Third, as a companion to the post-material thesis, the *new middle-class* thesis attaches the emergence of a new environmental ethics to the expanding class of ‘social and cultural specialists’ – teachers, social workers, journalists, artists, academics and others who work creatively or in public service-oriented jobs. Finally, Hannigan distinguishes a *regulationist* approach that attempts to account for the rise of environmental consciousness and action by identifying a tension in the political system of some Western European states, where environmental activism provided a wedge to break the ‘political closure’ of corporatist arrangements.

These accounts all have the merits – and, as Hannigan diligently points out, deficiencies. Yet he fails to suggest that the rise of environmental awareness could be linked to a deeper shift in the perception of society-nature relations. This is some-

4. Yet it is probably no coincident that the emergence of environmental ministries follows intergovernmental developments. Such ministries began to emerge at the time of the United Nations Conference on the Human Environment (1972), and the second spurt in their numbers occurred during the preparation of the United Nations Conference on Environment and Development (1992).

what surprising considering that Hannigan aims to establish a constructionist perspective, and constructionism is precisely about the politics of knowledge posits (Section 4.1). In view of their quantitative point of departure, it is even more surprising that it is a knowledge-sensitive account to which the authors of Figure 1.2 eventually turn. For them, like several others, the mobilisation around environmental themes should be seen in the light of an emerging conception of human society as integrated in complex interdependencies between the organic and the inorganic, or simply as part of ecosystems:

the scientific view of nature, which has spread with increased scientific knowledge and public awareness, asserts the existence of *a global and interdependent ecosystem* that encompasses human beings and sustains the very possibility of life. Some components of this system are local and regional; others are intercontinental or global; rarely are they coterminous with national boundaries. The universalized conception of interdependence in such a view of nature provides a much stronger frame for international discourse and activity around the environment that did sentimental or resource views. (Meyer et al. 1997: 630, italics added; also Ward 1998)

I am reluctant to identify the rise of ecosystem ecology – and a broader, nonscientific mode of ecosystem thinking – as *the* reason for the impressive rise of environmental activities since round about 1970. Yet a broadly defined mode of ecosystem thinking certainly suffuses much if not most contemporary environmental thought and action, even if the concept itself is not always used (Sachs 1992; Ross et al. 1997). This is significant, because the ecosystem concept is intensely spatial and gives rise to a powerful geographical world-view.

Ecosystem Ecology

The origin of ecosystem ecology is the subject of lengthy conceptual histories (Hagen 1992; Golley 1993), and the development of the modern science of ecology, in which the ecosystem is an integral if sometimes contested concept, is an even vaster subject (Worster 1994). This issue is further complicated by the fact that the ‘ecosystem’, like other notions from scientific ecology, has migrated to political ecology and public discourse. For the present purpose, however, we can cut straight to the highlights, and although one should not make a fetish of the ecosystem concept itself, it seems appropriate to start with its inception.

The ‘ecosystem’ was really launched by Eugene Odum in the first textbook based on the concept, *Fundamentals of Ecology* (first published in 1953). Yet the term was coined some twenty years before in a polemic article by Tansley (1935), which in important respects signalled a shift in the evolving science of ecology. Tansley had several axes to grind in this pivotal article. But the brunt of his criticism was aimed at the use of terms like ‘community’ and ‘organism’ in early ecology, notably that of Frederic Clements (1874-1945), and the holistic philosophy that usually went with the application of such terms. Clements was by no means the only

significant ecologist during the formative phases of the science of ecology. His ideas on plant communities extended on Eugene Warming's pioneering work on ecological plant-geography, for example, and Clement's holistic organicism was shared by many of his contemporaries (Worster 1994).⁵ Yet, by way of his enthusiastic supporter and interpreter, John Phillips, Clements was the main target of Tansley's criticism, and short presentation of Clements' ecology may help to contrast the ecosystem concept.

Like many early ecologists, so did Clements mainly deal with plants and his work was in this respect dominated by two interrelated themes (Worster 1994). First, like Warming before him, Clements focussed on the dynamic of ecological succession in geographically distinct plant communities. For Clements, this dynamic did not happen at random, but as a clear progression through identifiable stages, beginning with a primitive and inherently unbalanced plant assembly, and ending in a complex formation in relatively permanent equilibrium with the surrounding conditions. Such 'climax communities' would reestablish themselves following disturbance, and was by Clements seen to evolve in distinct climatic regions. Second, and apparently inspired by Herbert Spencer, Clements saw the climax community as a 'complex organism'. This was not simply a suggestive image. Much like biological organisms, so was the climax community by Clements literally seen as an organic entity composed of interacting parts and a life cycle of its own. In fact, this organism was for Clements one

of higher order than an individual geranium, robin or chimpanzee. [...] Like them, it is a unified mechanism in which *the whole is greater than a sum of its parts* and hence it constitutes *a new organic being* with novel properties. (Clements quoted in Worster 1994: 211, italics added)

This claim that an ecological ensemble of plants (and later animals) makes up an 'organic being' in which 'the whole is greater than a sum of its parts' also suggests the holistic philosophy of Clements. This position relates to the argument between reductionism and holism. Reductionism claims that we can understand the nature of a phenomenon by reducing it to its parts. The problem, then, is to restore the parts to their proper order. Scientific holism, on the other hand, does not deny the value of reductionism, but adds that it is essential to understand the rules that make an object of parts (Golley 1993). For Clements and several other early ecologists, the 'complex organism' was such an object, and holism provided the philosophical justification for their anti-reductionist position (Hagen 1992).

During the latter part of his career, Clements joined forces with a leading animal ecologist and merged plant and animal communities into a broader 'biotic community', what they also termed the 'biome'. But Clements remained faithful to his

5. Thinking in terms of organism analogies was not confined to ecology, of course. Such modes of thinking were for example widespread in early political geography where the state – more or less metaphorically – was seen as an organism behaving according to sets of 'natural laws'. The contributions by Ratzel (1896/1969) and Kjellén (1916) are in this respect among the notorious (for a broader discussion of organism metaphors in geography and beyond, see Buttner 1993).

botanical background and insisted that in any biome it is the plants that determine the animal population (Worster 1994). In short, therefore, the world of plants and later animals was in early ecologies like that of Clements seen as distinct, geographically distributed ensembles governed by the climate. Without the organismal tinge, perhaps, traditionally disciplined geographers may recall this mode of thinking from the atlas-page of biomes – the major environmental zones of the earth marked by a climatically distinct plant cover and related animals, for example the subarctic tundra biome.⁶

Tansley's (1935) criticism of Clements' ecology was mainly conceptual, and considering how little hard evidence he provided, one may wonder whether his landmark article would pass a contemporary scientific peer review. But that makes it easy to summarise his criticism. Most straightforward, Tansley rejected the term 'community' as too anthropocentric; community implies members, he asserted, and animals and plants 'are not common members of anything except the organic world' (296). The term 'organism', on the other hand, was too biological. Tansley conceded that ecological ensembles could resemble organisms, but he preferred to restrict the term to the commonly accepted biological entities of individual plants and animals. Ecological ensembles were simply in his view too different from individual plants and animals to receive the same unqualified designation. Moreover, Tansley found it 'quite illegitimate' that 'vegetation is an organism and therefore *must* obey the laws of development of what we commonly know as organisms' (289). If this was the case for vegetation, then, of course, the organismal view of ensembles of plants and animals was even more illegitimate. And the organism analogy was further undermined if, as Tansley emphasised, ecological analyses should include interactions with the inorganic world in a wider sense than only the climate. Finally, Tansley confronted the issue of holism in conceptions of ecological ensembles as 'organisms'. In this respect, he was particularly critical of the view that a particular collection of parts could make up a whole, which could act as the cause of its own activities, i.e. that a whole is greater than the sum of its parts. Rather, Tansley contended that such activities of a whole 'are *in analysis* nothing but the synthesised actions of the components in association' (299). Tansley argued, in other words, that a whole – to some extent, at least – was an abstraction that could be reduced to its component parts. Instead of society or biology, he therefore looked to physics for a description of the interaction of the organic and inorganic, which could imply an ecological whole but still be open for reductionist analyses:

6. We may in passing note that it is such biomes, which Byers evokes (and maps as 'ecoregions') in an article on the conflicts that might erupt from the 'incongruities between the natural boundaries of ecosystems and the political borders of states' (Byers 1991: 65). This is well in line with Clements view of nature as composed of geographical distinct entities, of course. Yet, as we will see shortly, Byers' approach is at odds with most ecosystem ecology, which does not conceive the ecosystem as a concrete entity but, rather, as an abstract concept to situate ecological analyses in time and space (on the 'ecosystem' as concrete entity and abstract concept, see Ross et al. 1997). In the latter perspective it does not quite make sense when Byers prophesies that environmental conflicts are likely to be found 'where ecogeographical and state boundaries do not coincide' (Byers 1991: 72).

[T]he more fundamental concept is, as it seems to me, the whole *system* (in the sense of physics), including not only the organism-complex, but also the whole complex of physical factors forming what we call the environment of the biome – the habitat factors in the widest sense. [...]

It is the systems so formed which, from the point of view of the ecologist, are the basic units of nature on the face of the earth. [...]. These *ecosystems*, as we may call them, are of the most various kinds and sizes. They form one category of the multitudinous physical systems of the universe, which range from the universe as a whole down to the atom. (Tansley 1935: 299)

In the somewhat clearer words of another foundational article, which took up from Tansley, the ecosystem could thus be defined as ‘the system composed of physical-chemical-biological processes active within a space-time unit of any magnitude’ (Lindeman 1942: 400). Gone was, in principle, the view of ecological ensembles as geographically distinct and organic entities with a ‘life’ of their own.

The Ecological World-View

Much has happened in ecology since the time of Tansley. But if we are to believe Golley (1993), it is essentially the ecosystem concept Tansley pioneered that remains with us today. Individual ecologists may challenge this view, and the ecosystem concept has in recent decades lost some of its appeal within the science of ecology (Hagen 1992). For our purpose, however, we can bypass the developments in recent ecology to note that the ecosystem has been an astonishingly pervasive concept.

For the science of ecology, the ecosystem emerged as concept, which lend itself to the positivist methodology that triumphed in most science after the second world war. Like other sciences, so was ecology supposed to produce causal hypotheses, which are empirically testable and general in their prognosis – what we in the next chapter will encounter as the natural science ideal of theorising (Section 2.1). This search for general laws implies concentration on a minimum of elements which are common to a maximum of settings, and it was exactly the possibility of a reductionist methodology Tansley tacitly entertained when he introduced the ecosystem concept. Moreover, elements and their relationship have to be measurable, which is to say that quantitative analysis had to replace the more qualitative or descriptive approach of the ‘old’ ecology. As a notion borrowed from physics, the ecosystem was also in this respect expedient. Pioneered by Raymond Lindeman and Howard Odum, among others, energy thus became a common denominator for many ecologists to measure relations between the organic and the inorganic in ecosystems. And with the entry of cybernetics, ecology truly appeared to move from organismic holism to mechanistic reductionism (Hagen 1992; Sachs 1992).

Considering this genealogy of the concept, it is somewhat surprising that the ‘ecosystem’ also resonates strongly among environmental activists who are often considered to harbour Romantic sentiments and suspicions of scientific reductionism. Yet, Dobson notes, ‘it is remarkable, indeed, to see the extent to which the success

of modern political ecology has been mediated and sustained by scientific research' (Dobson 2000: 11). And the genealogy of the ecosystem also provides a clue to the smooth migration of the concept. The organismal view of ecology and the affiliated philosophy of holism, which Tansley had sought to oust from ecology, was often as much a matter of moral idealism as hard-nosed science. On the one hand, many early ecologists were thus attracted to organicism as a personal antidote to what they perceived as rampant individualism and cultural fragmentation; on the other hand, the vision of organic relatedness also fulfilled a need by many to caution against hubris in humans' attitude towards nature. Such views found philosophical support in the writings of Alfred Whitehead, among others, and were in ecology explicitly advanced by William Wheeler (Worster 1994). In fact, Hagen (1992) reminds us, Tansley and several later scientific ecologists never quite abandoned at least a pinch of organicism and holism in their ecologies. But as scientific ecologists increasingly converted to reductionism, so did a notion of organicism with its moral underpinnings survived and thrived in increasingly enlarged segments of the environmentally aware public (Worster 1994). To the dismay of some scientific ecologists, this 'lay ecology' borrowed selectively from the science of ecology: 'ecosystem' could replace organismic notions to signify fundamental interdependencies in nature and between nature and society, while scientific notions like 'dynamic equilibrium' and 'homeostasis' could be appropriated to emphasise the all-powerful need to maintain or reestablish stability in such systems. But for the public of lay ecologists, including an increasing number of policymakers and environmental managers, the term usually retains a sense of transcendental wholeness:

It was the concept of ecosystem that thus combined the organicist heritage with scientific reductionism. And it is this concept of ecosystem that gave the ecological movement a quasi-spiritual dimension and scientific credibility at the same time.

Since the 1960s, ecology has left the biology departments of universities and migrated into every man's consciousness. The scientific term has turned into *a worldview*. And as a worldview, it carries the promise of reuniting what has been fragmented, of healing what have been torn apart, in short of caring for the whole. [...]. The conceptual switch that connected the biological circuit with that of society at large was the notion of ecosystem. (Sachs 1992: 31-32, italics added)

This environmental world-view, for which the 'ecosystem' can serve as shorthand, has an immense power of inclusion since it unites not only plants and animals, but also the inorganic world and human society. Yet this power of inclusion is also immensely geographical. We have already seen how early ecology approached ecological ensembles of plants and later animals as distinct and geographically discrete entities. In the language of geography, early ecology engaged in a variant of areal differentiation. This changed with the introduction of the ecosystem concept; in fact, Hagen (1992: 87) is not wide off the mark when he claims that Tansley 'freed' ecology from the 'rigid geographical basis' that had characterised earlier perspectives. Rather than a concrete geographical entity to be identified in nature, the

ecosystem is more a heuristic device or an abstract concept for ecologists to situate their analyses in time and space: ‘Actually the systems we isolate mentally are not only included as parts of larger ones,’ Tansley wrote, ‘but they also overlap, interlock and interact with one another. The isolation is partly artificial, but is the only possible way in which we can proceed’ (Tansley 1935: 300). More recently, with an echo of the ‘positivist’ ethos of contemporary ecology, Allen and Hoekstra makes similar point: ‘Ecosystems may or may not be out there in the real world. What is important is that they appear to be helpful conceptions that lend predictive power’ (Allen and Hoekstra 1992: 91). But this does not imply that ecosystems are not spatial. Quite the contrary. For Allen and Hoekstra, ecosystems should be understood in terms of scale, by which they mean size in time and space. And as size is a matter of measurement, they argue, so is scale not independent of the scientists’ measuring scheme. In fact, this centrality of scaling is for Allen and Hoekstra a key feature of all ecology:

All ecological processes and types of ecological structures are multiscaled. Each particular structure relates to a particular scale used to observe it such that, at the scale of perception, the entity appears most cohesive, explicable, and predictable. The scale of a process becomes fixed only once the associated scale structures are prescribed and set in their scaled context. Scaling is done by the observer; it is not a matter of nature independent of observation. (Allen and Hoekstra 1992: 11, italics added)

Turning to the language of geography, again, we could say that the introduction of the ecosystem marks a transition from an absolute to a relative conception of space in ecology.⁷ Rather than ecological regions ordered ‘horizontally’ next to one another across space, the ecosystem concept heralds an epoch where ecological systems are seen as nested ‘vertically’ within each other in space. It is therefore the task of the ecologist to bound the particular system of his or her concern. Ecologists might be able to devise rigorous methods for this delineation or scaling of ecosystems. But in the general public of lay ecologists, the scalar ambiguity of ecosystem thinking presents a formidable picture. Not only are we interdependent parts of ecological systems, which we may recklessly disturb, but this interdependence extends spatially from the microscopic to the entire universe; for all practical purposes, the Earth is in this perspective the final scale of all ecological relations. It is no coincidence, then, that ‘Think global, act local’ has become an environmental maxim. Nor is it surprising that the Apollo space photos of the Earth seen from space became icons of the emerging environmental awareness in the early 1970s (Figure 1.3; Cosgrove 1994). The ‘Whole Earth’ image has adorned the annual *State of the World* reports from the

7. This parallel is not as far fetched as one may think. At the height of the ‘quantitative revolution’ in geography, Stoddart (1965) thus turned to ecology and the ecosystem concept for a research method to overcome the exceptionalism of regional geography: ‘Partaking in general system theory,’ he wrote, ‘the ecosystem is potentially capable of precise mathematical structuring within a theoretical framework, a very different matter from the tentative and incomplete descriptions of highly complex relationships which too often pass as geographical “synthesis”. [...] By its general system properties, it [the ecosystem] brings geography back into the realm of the scientific revolution of this century from which the Kantian exceptionalist position excluded us.’ (249).



Figure 1.3 'Earthrise' (29 December 1968) and 'Whole Earth' (12 September 1972).

Worldwatch Institute, for example. And even scientific ecologists cannot always quite resist the suggestive pull of these images. The 'Earthrise' photo is thus included among the titlepage images of the third edition of Eugene Odum's ecosystem-based *Fundamentals of Ecology* (1971). This world-view or, rather, Earth-view of profound ecological – and spatial – interdependence was essentially what the Brundtland Commission evoked when it proclaimed that the 'Earth is one'; 'From Space,' the commission wrote with holistic-organismic pathos, 'we can see and study the Earth as an organism whose health depends on the health of all its parts' (WCED 1987: 1).

1.3 Environmental Interdependence

The two world-views sketched in the previous sections are clearly in many ways at odds. For our purpose, however, it is their contrasting spatiality that is central. This contrast was not lost on William Anders, the astronaut who shot the 'Earthrise' photo, when he in a famous interview expressed his feeling of seeing the earth from outer space:

The earth appeared as a small, blue-green sphere like a beautiful ornament, very delicate and limited ... The ancestral home of mankind did not appear vast, unlimited and indestructible ... It seemed much more like a delicate and fragile ornament that you must preserve and protect with appropriate care. Looking back, I saw no national boundaries, no dividing the earth into separate states, each with a different colour as you see a globe in a schoolroom, a globe divided by man but obviously not by nature. (Quoted in Urry 1999: 177)

Like the Brundtland Commission some twenty years later, and many others in between and after, Anders thus evoked a spatial tension between environmental wholeness and state-political separateness, which comes together in the notion of environmental interdependence. To be sure, some environmental problems may be seen as located inside the territory of a state and therefore – in principle – within the

purview of conventional political authority and regulation. But other concerns may extend beyond the regulatory territory of a single state. Indeed, because of the scalar nature of ecosystem thinking, environmental concerns will as often as not spiral beyond the territory of individual states and into the alleged ‘anarchy’ of world politics. A notion of ecological interdependence is therefore easily translated into a prototype example of political interdependence; that is, in a well-known if somewhat conventional formulation, ‘situations characterised by reciprocal effects among countries or among actors in different countries’ (Keohane and Nye 2001: 7). The spaces of many environmental concerns are, in other words, seen as dislocated from the territorial space of conventional authority. And in a world without any formal authority above the sovereign states, such situations of environmental interdependence appear for many to pose a problem of achieving ‘governance without government’ (Young 1994).

We will in the next chapter take a closer look on two very different contributions to the literature on the politics of environmental interdependence. For the moment, however, we shall merely take note of the apparently plain proposition that the notion of environmental interdependence describes a tension between two radically different geographical world-views: on the one hand, the modern geopolitical view of a world divided horizontally into spatially discrete territorial sovereignties; on the other, the late-modern view of Earth as made up of spatial ecosystems that are vertically nested within each other from the microscopic to the globe itself.

This tension between environmental wholeness and political fragmentation made its formal entry into intergovernmental politics when the United Nations Conference on the Human Environment in 1972 adopted the so-called Stockholm Principles. On the one hand, the much-quoted Principle 21 of these principles affirms the world of territorial states when it declares that states have ‘the sovereign right to exploit their own resources pursuant to their own environmental policies’. On the other hand, however, it also recognises the boundary-transcending spatiality of many environmental problems when it declares that states have ‘the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction’. This principle has become the centrepiece of ‘soft’ international environmental law and is word-by-word (with the addition that rights and responsibilities also concerns ‘development’) repeated as Principle 2 in the 1992 Rio Declaration.⁸

A more concrete illustration of the spatial tension embodied in the notion of environmental interdependence can be found in the Baltic Sea area, where the need for intergovernmental cooperation routinely is visualised in maps of the main topographical catchment area, which, one way or another, is superimposed upon the state boundaries of the area (Figure 1.4). As we will see in later chapters, this view of

8. ‘Declaration of the United Nations Conference on the Human Environment’ (Stockholm, 1972); ‘Rio Declaration on Environment and Development’ (Rio de Janeiro, 1992). Both declarations are available on the home-page of the United Nations Environmental Programme (www.unep.org).



Figure 1.4 Environmental interdependence in the Baltic Sea area: state boundaries and the catchment area.

environmental interdependence in the Baltic Sea area was slow in coming. Presently, we shall only note the meaning contained in this mode of representation, namely that the catchment area designates the sphere from where harmful effluents to the Baltic Sea ‘by nature’ can be expected to originate, and, furthermore, that this space transgresses state boundaries and therefore requires concerted intergovernmental action. Tellingly, Mitchell (2002) evokes this image when he employs Baltic Sea environmental cooperation as a practical example of ecosystem management.

We should at this point notice that the spatial tension between environmental concerns and sovereignty not only involves physical spillovers over state boundaries. I have no intention of engaging in a taxonomic exercise. Yet a brief outline of three typical domains of environmental interdependence may serve as an entry to the topic of the following chapters. First, we have *transboundary environmental problems*, which involves environmental process and phenomena that have an intrinsic capacity to cross the territorial boundaries of states. This type of problems can be subdivided in many ways, which all have political ramifications (Kasperson and Kasperson 2001).

For the present purpose, however, we should only note that a transboundary problem can involve the utilisation of an environmental resource ('source' problems), for example water from a boundary-transgressing river basin, but are more often than not about pollution ('sink' problems); also, a problem can be a 'diffused' issue, for instance involving effluents from agriculture, or be a 'point' issue, for example the Chernobyl accident. These simple distinctions also apply to the following two types of environmental interdependence. Whatever the composition, however, the political problem of transboundary environmental issues is that causes and effects are disbursed between different territorial jurisdictions.

Second, we find issues relating to *global commons*, typically the oceans, outer space, the atmosphere and the polar regions (Vogler 1995). These areas are beyond the formal territorial jurisdiction of any state; they are in Litfin's (1997) formulation not 'sovereignised'. The political problem is in this respect that states and individual actors without control by an authority can engage in activities, which, intended or not, may degrade what sometimes in lofty moments are termed the 'common heritage of mankind' (Imber 1988). The risk is, in other words, that the global commons may become a large-scale example of Hardin's (1968) 'tragedy of the Commons'; that is, in short, the hypothesis that communities or individuals without a controlling power may over-exploit a shared environment against long-term interests of themselves and the collective.

Finally, and most controversial, we have what could be termed *internal environmental degradation*. Traditional norms of sovereignty suggest that states can treat the environment of their territorial jurisdiction as they see fit. Indeed, this is central to Principle 21 of the Stockholm Principles. Yet, several 'internal' environmental issues have risen to the scale of world politics and intergovernmental negotiations, ranging from trade in endangered species to issues of biodiversity conservation. This will often entail that the issues are framed as affecting the global commons (Litfin 1997). Rainforest deforestation is a case in point. But as it for example is reflected in the well-known Brazilian opposition to 'outside' interference in its forest policies (or lack of them), this framing of 'internal' issues as global commons can be highly controversial. Yet, in a sense it can be argued that 'the Amazon does not lie (solely) within the territory of Brazil' (Kuehls 1996: x). In part, the political problem of internal environmental degradation is thus that such issues are located within a state territory but, nonetheless, by some are seen as outside the realm of sovereignty; they are in Castree's (2003) formulation 'local' but 'leaky' in the sense that a problem may arise within a particular state but have serious implications (moral, financial, aesthetic, health, etc.) for a whole set of other states and actors.

These three basic types of environmental interdependence are nothing but ideal-types, which can be difficult to identify in practice but, nonetheless, in some respects can be analytically helpful. Based on a similar distinction, Litfin (1997) argues, for example, that the 'sovereignty bargain' in intergovernmental environmental politics is likely to vary according to the domain at hand. This might be the case, but rather

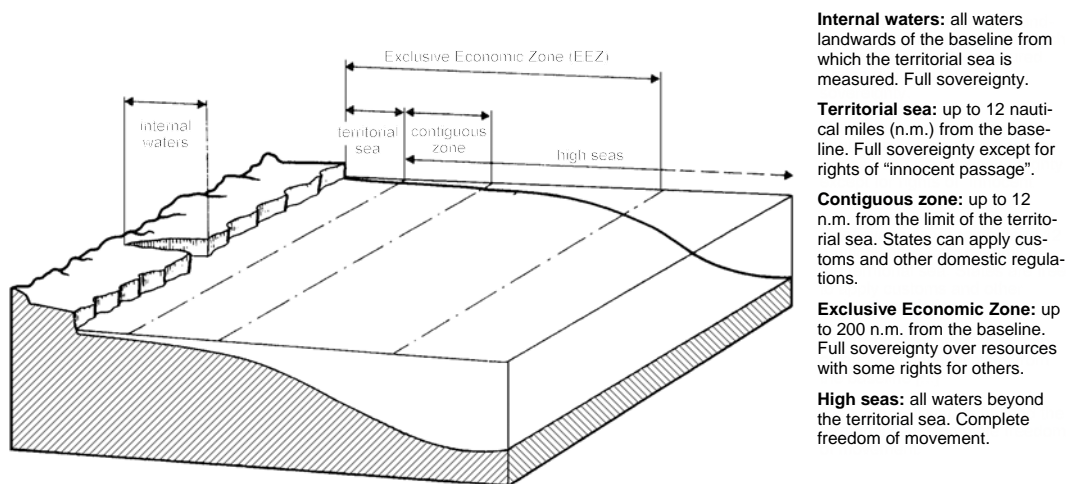


Figure 1.5 Creeping territoriality: zones of ocean jurisdiction according to the 1982 United Nations Convention on the Law of the Sea. Adapted from Blacksell (2000).

than engaging in discussions like that, we shall note the problems of identifying such ideal-typical instances of environmental interdependence. In the first place, we may thus encounter the plain problem that the formal understanding of an issue like 'global commons' changes. Imber (1988) argues, for example, that several global commons are caught in a process of 'creeping territoriality', which is to say a gradual extension of traditional claims to sovereignty. This process is particularly pronounced in relation to the oceans, and as this issue has bearings on the topic of the Baltic Sea, we may take a brief look at the question.

In simple terms, the modern history of ocean governance can be portrayed as a struggle between two competing conceptions of the oceans as a social space, which found their classic advocates in seventeenth century Europe: one the one hand, the idea of 'free' seas epitomised by Hugo Grotius' system of *mare liberum*; one the other, the notion of territorially 'enclosed' seas advanced in John Selden's system of *mare clausum*. Although widespread among legal historians, this is surely a too dichotomous presentation of the political reality. Yet for our purpose it will do to recognise that it essentially was the idea of the oceans as a 'free' space that gained the upper hand. In stark contrast to the system of discrete territorial states, which in the same period was institutionalised on land in Europe (Section 1.1), the oceans thus became an unregulated space in which vessels moved as 'islands' of sovereignty; in an important sense, the politics of the modern ocean-space is the antithesis of the territoriality pursued on land. Still, the sovereignty regime of land was gradually extended to the sea, and by the late nineteenth century it was generally accepted that states could claim absolute sovereignty beyond their shorelines to an extent of three nautical miles – the range of a cannonball! However, following the rapid developments of the twentieth century, for example the possibility for offshore oil rigs but also military concerns, this customary delineation became too restrictive for many states. Starting in 1958, a series of conferences was therefore convened to establish

a new regime for intergovernmental ocean governance, which eventually resulted in the 1982 United Nations Convention on the Law of the Sea (Steinberg 2001). This convention has established an intricate – and in some respect controversial – system of jurisdictional zones involving various degrees of state authority (Figure 1.5). As we will see, some of these zones impinged on the first convention on the Baltic Sea environment (Chapter 3), while the subsequent phases of Baltic Sea environmental cooperation in a sense involved a ‘de-creeping’ of state territoriality (Chapter 5).

In summary, then, a designation such as ‘global commons’ is subject change; the oceans, for instance, are not quite as ‘common’ today as the allegedly once were. Discussions like this is primarily about the sovereignty side in the spatial tension between sovereignty and environmental concerns. But the problem of identifying the ideal-typical domains of environmental interdependence is also telling when it comes to the environmental side of the tension: is an instance of ‘internal environmental degradation’ in reality a ‘global common’ problem, for example, and when does a ‘global commons’ problem become a ‘transboundary environmental problem’ or vice versa? I have no intention of providing a formal answer to such problems – that is the job of lawyers. Rather, the point I wish to convey is that such questions involve ideas about the spatiality of an environmental problem. This is essentially the topic I will pursue in the following chapters. First, however, we shall pause with an outline of academic engagements with the politics of environmental interdependence.

Chapter Two

Approaching Environmental Interdependence

In the aftermath of the 1992 'Earth Summit' on environment and development in Rio de Janeiro, Steven Smith questioned whether the spectacle of the summit meant that environmental concerns at last had assumed a central position on the agenda of international relations. Smith was sceptical, because for 'powerful reasons,' which he saw as 'essentially political in nature,' the environment was in his analysis more likely to remain on the 'periphery both within the practice of international relations, and within the academic subject of international relations' (Smith 1993: 28). Now, it can surely be debated whether the attention to environmental issues in intergovernmental practices is an expression of actual commitments or, as Smith implied, mainly is a symbolic curtsy. But environmental issues are by no means on the peripheral in the academic subject of international relations if one takes the amount of scholarly labour devoted to the subject as a yardstick; the literature has, as a review puts it, been 'burgeoning' during the 1990s (Jakobsen 1999).

The substantial, if in the view of some (Vogler 1996) belated, attention to environmental politics in international relations studies should not come as a surprise; it is, after all, the academic subject, which is said to deal with issues that exceed the territories of sovereign states. One could therefore have expected a parallel surge of interest within international relations studies' academic cousin of political geography. Indeed, this was what Dalby sought to cultivate when he a decade ago observed that the politics of global environmental concerns raises 'numerous issues of relevance to geographical inquiry' (Dalby 1992: 504). Dalby recognised that geographers have made serious contributions to debates on the global environment as such, but he also pointed out that the political dimensions of such issues were underdeveloped and saw in this respect a challenge for political geography.

But geographers, 'political' or otherwise, have been remarkably slow to heed Dalby's summoning, and his work is still among the few examples of a sustained engagement with the politics of environmental interdependence in recent political geography. This does not imply that geographers have not addressed the politics of environmental issues in a wide sense. Steinberg (1997) thus distinguishes what he terms a 'new political geography of the environment'. This observation is correct in relation to many issues. Robbins (2003) shows, for example, how *Political Geography* during the 1990s has published a growing number of articles on a broad variety of environmental issues. And within human geography generally, issues such as political ecology and environmental justice have received considerable attention.

Still, Steinberg is in my view a little ahead of actual academic practices when he recognises a new political geography of ‘international environmental governance’. To me, this looks more like an agenda for Steinberg’s own work (Steinberg 2001). Taylor seems more to the point when he notes that ‘Global environmental politics has threatened to enter political geography in a big way on many occasions in the recent past, but never seems to have secured a firm foothold’ (Taylor 1996: 88). For Taylor, this relative absence of systemic engagements with the global aspects of environmental politics is no accident, because ‘there is a fundamental spatial mismatch between sovereign territories, the focus of political geography, and ecological systems’ (88). The very tension between environmental and political spaces, which in Chapter 1 was introduced as a core feature of environmental interdependence, should in other words explain the lack of interest.¹ This might hold for some traditional political geography, not least the ‘regional’ variant, which in line with Hartshorne’s (1954) definition of political geography as an element in his scheme for ‘areal differentiation’ survived in Anglo-American geography during the 1950s and 60s (e.g. Prescott 1972). But Taylor’s point does not quite fit recent political geography where ‘boundary-transgressing processes and tendencies’ have become a favoured theme (Ó Tuathail 2000: 166; also Newman and Paasi 1998). In this perspective, it is surprising that political geographers have not flocked to the issue of environmental interdependence.

The relative political-geographic silence on the politics of environmental interdependence is also surprising considering the many historical and contemporary attempts to situate nature-society relations at the centre of contested academic identity of geography (Livingstone 1992; Johnston 1998); political geography, Agnew points out, ‘has remained largely unconnected to “nature-culture” debates in contemporary Geography as a whole and without much presence in the environmental studies curricula that constitutes such an important part of Geography’s presence within higher education in a number of countries’ (Agnew 2002: 157). This should by no means be read as implying that environmental interdependence because of the implicated nature-society relationship is a ‘proper’ object for geographical inquiry. Geography, like any other branch of academia, is created in response to circumstances specific to time and place and within an already existing academic division of labour (Johnston 1986). What is considered ‘geography’ or otherwise is therefore a question of institutional conventions, practices and, indeed, insurrections that should not guide research. Still, political geographers could in an engagement with the politics of environmental interdependence have drawn upon geographers previous

1. This does not imply that Taylor finds global environmental politics an ‘illegitimate’ topic for political geographers. Quite the contrary. Taylor’s eloquent article on the development and future of the modern state thus ends on a note, which highlights the tension between political and environmental spaces: ‘states are not ecosystems. Territoriality was finally accepted as the primary political strategy after the anarchic implications of a negative-sum game – the anti-territoriality of the central European thirty years war – became widely appreciated. In a neat reversal, as we approach another negative-sum game – testing the fragility of the Earth’s ecology – anti-territoriality will have to be part of the solution with territoriality the problem’ (Taylor 1994: 161).

and contemporary attention to nature-society relations as a source of inspiration and – in view of the determinist legacy (Section 1.2) – warning that is not as readily available to many other social scientists. More to the point of my concern, which is with environmental *politics* rather than the nature-society nexus as such, is my belief that also other insights from current geography can fertilise existing studies of environmental interdependence.

The possible contribution from academic geography is something to which we will return later in this and the following chapters; here the lack of systematic engagements with the politics of environmental interdependence within geography is just mentioned to explain the focus on international relations studies in the following. This been said, however, it would be wrong to imply that the field of international relations is alone in addressing questions of global environmental politics. Conca and Lipschutz (1993) have thus in an early review recognised two ‘principle conceptual axes’ in the emerging scholarship. They did not apply explicit terms to these axes, but their description corresponds with Jakobsen’s (1999) more recent distinction between ‘international relations scholars’ and the ephemeral notion of ‘green’ contributors to the literature. If anything, these broad categories suggest the problem facing would-be reviewers of the literature that bears upon the question of environmental interdependence: the literature emanating from ‘international relations scholars’ might be fairly easy to identify – it is, after all, an institutional distinction; but the conceptual axis of ‘green’ writers includes a diverse group of natural scientists with an inclination for social issues, social and political theorists, philosophers and activists. It is not surprising, then, that Jakobsen simply decides to narrow her review to the works of international relations scholars, nor that the attempt by Laferrière and Stoett (1999) to embrace both conceptual axes in a synthesis result in a book-length review.

The following chapters use and discuss contributions from both ‘conceptual axes’ on global environmental politics, not to mention literature from other spheres of social inquiry. Yet I will not provide a conventional review of the diverse literature as such exercises all too easily result in tedious inventories (‘look how much I have read!’) or unjust caricatures (‘look how mistaken all the others are!’). Instead, I will pursue what could be termed a ‘grounded review’ by focussing on two influential and, to some extent, paradigmatic contributions to the literature on the politics of environmental interdependence. Among the several potential candidates for such a review, I have chosen to look at the introduction and conclusion of *Institutions for the Earth* by Haas, Keohane and Levy, and *Beyond Sovereign Territory* by Kuehls.

As we will see, these contributions are as different as they possibly could be. For a start, however, we can establish that they represent two radically different understandings of the *purpose* of academic research. Habermas (1971) provides a well-known entry to this issue in his distinction of three ‘cognitive interests’ in research: first, the ‘technical’ interest in understanding how to extent control over nature and society; second, the ‘practical’ interest in understanding how to create and maintain

orderly communities; and the ‘emancipatory’ interest in identifying and eradicating unnecessary social confinements and constraints. For our purpose, however, we can do with the simple but suggestive distinction between *problem-solving* and *critical* approaches introduced by Cox (1981). The contribution by Haas et al. is thus a prime example of the problem-solving approach, which ‘takes the present as a given and reason about how to deal with particular problems within the existing order of things’ (Cox 1994: 101). Kuehls, on the other hand, represent a critical approach in the sense that he ‘stands back from the existing order of things to question how that order came into being, how it may be changed, and how that change may be influenced or challenged’ (Cox 1994: 101).²

The aim in probing the contributions by Haas et al. and Kuehls is twofold. First, while not representing the literature in its immense diversity, a presentation of these contributions can provide a reasonably detailed peek into some thoughts on the issue of environmental interdependence, which can serve as points of reference for later discussions of the wider intellectual landscape, and help to locate the approach I adopt. Second, the aim is to uncover how these very different contributions conceive environmental interdependence as an object. For it is the objectification of situations of environmental interdependence which is the subject of this study and academics, myself included, are not elevated from the process of objectification. To this end, the contributions by Haas et al. and Kuehls are first presented (rather than criticised) in separate sections. Using the two contributions as an entry, the third section then turns to the question of environmental interdependence as an object. I will in this respect argue that Haas et al. and Kuehls – from their markedly different perspectives, like most of the literature – bypass or neglect the politics involved in the spatial objectification of the ‘environment’ in situations of environmental interdependence, and propose a critical environmental geopolitics to address this issue.

2.1 Solving Problems Through Institutions

When scholars of world politics began to address issues of environmental interdependence, it was common to find analyses that identified the principle of sovereignty as a severe obstacle to environmental action. In one of the sporadic studies by a geographer, for example, Johnston argues that in the ‘spatial reality’ of a world divided into discrete sovereign states there is ‘little evidence of individual states’ willingness to yield substantial parts of that sovereignty in order to tackle environmental problems’ (Johnston 1992: 212). For another group of scholars, however, environ-

2. Cox describes both approaches as ‘theories’. This is somewhat unfortunate since ‘critical theory’ easily can be seen as a reference to the Frankfurt School and Habermas. The parallels are imminent, of course, but Cox’s ‘critical theory’ should probably be seen in a broader perspective resembling what Sayer terms ‘critical social science’; that is, ‘critical empirical studies of substantive objects, such as feminist and Marxist research, as distinct from *critical theory*, associated with the Frankfurt School and Habermas and others which is pitched at the level of meta-theory’ (Sayer 2000: 169).

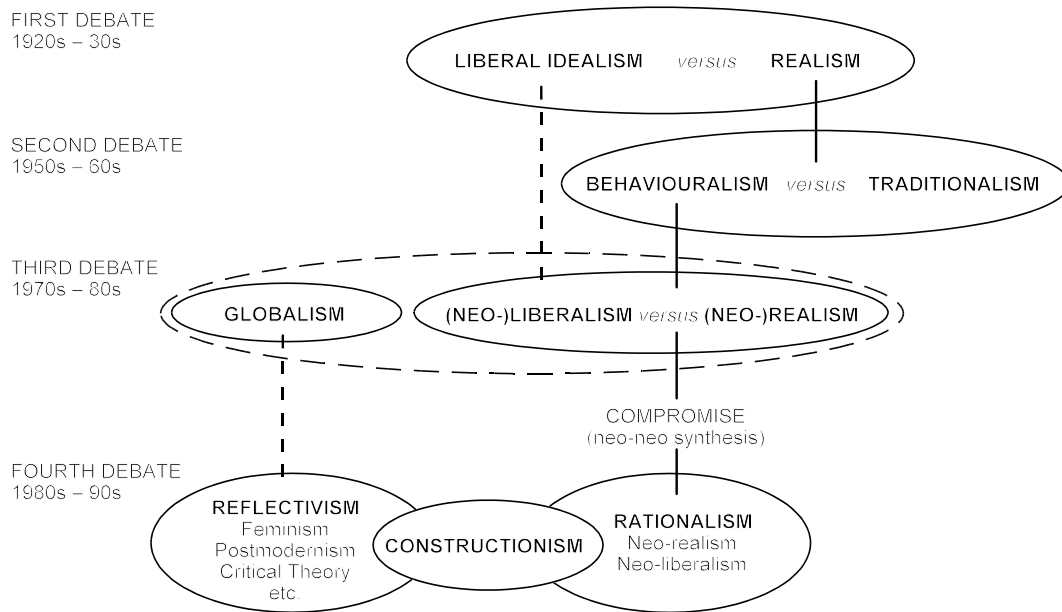
mental interdependence was seen to undermine the notion of territorial sovereignty. In an early contribution to the 'environmental security' literature, for example, Mathews notes: 'Environmental strains that transcend national borders are already beginning to break down the sacred boundaries of national sovereignty, previously rendered porous by the information and communication revolutions and the instantaneous global movement of financial capital' (Mathews 1989: 162).

Litfin (1997) describes these positions as the 'sovereignty-as-enemy' and the 'erosion-of-sovereignty' theses on the tension between sovereignty and environmental concerns. These theses may at first appear mutually contradictory, and yet they are often found to coexist in actual analyses. In part, this apparent paradox relates to the often muddled distinction between 'formal' and 'actual' conception of sovereignty (Section 1.1). States can thus obstruct intergovernmental environmental cooperation by upholding their formal sovereignty, for example, and simultaneously lose some of their actual sovereignty because of transboundary environmental pollution. This may serve as an illustration of the problems involved in the categorisation of a large body of literature: few actual studies fits comfortably into the abstract compartments one may choose to construe.

This been said, however, we can safely say that Haas, Keohane and Levy (1993) dismiss both theses in their contribution to the literature on the politics of environmental interdependence. More to the point, the possibility of sovereignty being 'eroded' by environmental issues is not really a first concern for the authors.³ For them, 'Environmental interdependence restricts the ability of states to attain their objectives unilaterally' (415). But 'world government is not around the corner' and organised responses to shared environmental problems must therefore 'occur through cooperation among states, not through the imposition of government over them' (4). The framework for action in situations of environmental interdependence is, in other words, the Westphalian system of states (Section 1.1). This adoption of the existing political order as the given starting point is by itself a clear indication of the problem-solving perspective of the authors. Moreover, they are refreshingly explicit about this aim when they repeatedly state that their purpose is to 'help the current generation of world leaders to develop more effective international environmental institutions' (6).

State sovereignty is thus for Haas et al. a principle one must respect, or as the authors put it: 'We cannot wish away state sovereignty, any more than nationalists can dispel the reality on environmental interdependence' (417). ('Nationalist' should in this context be understood as isolationism, a sort of environmental autarky.) Yet they are quick to add that this should not cause depression about the possibilities for

3. In a roundabout way, Haas et al. nonetheless evoke a sense of 'eroding' sovereignty. Formal sovereignty, they conclude, 'is threatened neither by international environmental interdependence nor by the agreements states make to regulate it'. But states may 'permit their *operational sovereignty* – their legal freedom of action under international law – to be eroded' (416). Haas et al. could thus be seen as edging towards a 'relative' conception of sovereignty (Section 1.1). Yet their 'operational sovereignty' is fashioned as something states can 'permit' to be 'eroded' and therefore still within the purview of formal sovereignty.



environmental action. For unlike those who see sovereignty as an 'enemy' of environmental action, states can in their view develop effective intergovernmental 'institutions' to govern situations of environmental interdependence: 'state sovereignty is not incompatible with international progress in solving difficult problems' (23-4).

4. In the early years, in particular, this substantial body of literature described its object of study as 'regimes' and became known as 'regime theory'. More recently, however, several proponents of this line of study have begun to speak of 'institutions' (e.g. Young 1994). This literature often involves subtle distinctions between 'regimes' and 'institutions', but we will for the sake of simplicity merely speak of 'institutions' and 'institutionalism' in the following. (For an extensive discussion of regime-theory/institutionalism in international relations studies, see Hasenclever et al. 1997.)

realm of institutionalism that we find two of the most copious studies of environmental politics in the Baltic Sea area (List 1991; Hjorth 1992).

International Relations Studies at a Glance

This is not the place for a detailed discussion of the intellectual landscape of international relations studies, which sometimes appears curiously preoccupied with the internal demarcation of schools of thought and ‘great debates’ (for critical introductions, see Smith 1995 and Wæver 1996). Yet it is at this stage necessary to insert a brief presentation to the field that can help to situate the contribution by Haas et al. theoretically, and also serve as a reference point for later discussions. To this end, I have for the benefit of those unfamiliar with the scholastics of international relations studies sought to chart the basic history that is usually told about the development of the field (Figure 2.1). The figure is a gross simplification, of course. Yet it will do for our purpose, particularly as the institutional perspective pursued by Haas et al. is part-and-parcel of the mainstream, which is best covered by the standard history and, purely by coincidence, is sketched to the right in the figure.⁵

The institutionalism pursued by Haas et al. emerged during the 1970s and 80s as part of the ‘third debate’ in international relations studies. Also known as the ‘inter-paradigm’ debate, this so-called debate is usually portrayed as a contest between three allegedly incommensurable perspectives: globalism, liberalism and realism, where the latter two commonly are prefixed ‘neo’ to tell them apart from the historical predecessors.⁶ Although regularly canvassed (e.g. Viotti and Kauppi 1993), the notion of a ‘debate’ is deceptive since it implies perspectives confronting each other over how to explain world politics. In fact, Smith argues, ‘there has been very little at all in the way of debate between the rival positions. Rather, each has had its supporters, and these have referenced one another, been on one another’s conference panels, and built incrementally on one another’s work’ (Smith 1995: 19-20).

This conclusion is maybe a little too harsh. There has been, and still is, a debate between the liberal and the realist positions, which to some extent has resulted in a rapprochement some has nicknamed the ‘neo-neo synthesis’ (Wæver 1996). Yet Smith is right on the point concerning the lack of debate between ‘globalism’ and the

5. I have in the figure sought to use the terms that are common in international relations studies. It should be noted, however, that some of these terms have been introduced by one group of scholars to denote (if not denounce) their academic ‘adversaries’. Also, some terms – notably ‘realism’ and ‘constructionism’ – have different meanings in international relations studies than in most other social sciences. I will try to untangle such curiosities as need arises.

6. ‘Realism’ in international relations studies connotes an emphasis on the role of power, particularly the military power of states, in world politics. Most proponents of this *political* realism subscribe to some notion of *philosophical* realism, i.e. the ontological position that reality exists independent of our knowledge of it. But political realism should not be confused with philosophical realism, in particular not the ‘critical realism’ familiar to geographers (e.g. Sayer 1992). In fact, Patomäki and Wight (2000) argue persuasively that realism and most other perspectives in international relations studies from a critical realist point of view are embedded in a discourse of anti-realism.

liberal-realist mainstream. Globalism, which includes for geographers well-known approaches like dependency theory and world-system analyses, is a heterogeneous position that largely unfolded outside the (heavily Americanised) realm of international relations studies. Scholars of the mainstream occasionally note the existence of such alternatives, and then move on to argue their favoured position vis-à-vis their mainstream opponent. Keohane and Nye (2001) mention the existence of a 'Marxist' perspective, for example, but argue their liberal position in relation to realism. There has, in other words, rarely been anything by way of a serious debate between the 'radical' globalists, on the one hand, and the mainstream of 'reformist' liberals and 'conservative' realists on the other. This explains the focus on realism and liberalism in the following. As an aside, however, we may note that it was from the domain of 'globalism' that political geographers in the late 1970s found many tools to restore their study of world politics (Taylor 1982). Classic geopolitics like that of Mackinder (1904), on the other hand, is an explicitly geographical variant of realism. And contemporary critical geopolitics, a field to which we will return, is so closely aligned with the 'reflective' branch of international relation studies that one (mercifully) must look hard for disciplinary boundaries.

On the face of it, the debate between realists and liberalists in the 1970s and 80s can be seen as a rerun of the 'first debate' in international relations studies. International relations studies was established as a separate academic discipline in the wake of the first world war. Indeed, the new discipline was a child of the shock many experience by the carnage of the war and was permeated with the spirit of liberal 'idealism' that also guided the establishment of the League of Nations. Unlike the classic liberalism of a figure like Kant, this liberalism did not conceive peace as a natural condition, but as a condition that could be established through means such as intergovernmental institutions and organisations. The politics of the 1930s years militated against this strongly prescriptive and normative view, of course, and paved the way for the 'realist' perspective, which in the tradition of Machiavelli and Hobbes (if not Thucydides) sought to account for politics as the nasty practice it is rather than what it ought to be. These few lines do not do justice to the positions of the first debate, of course, and one can easily find marked differences between the 'classic' and current manifestations of realism and liberalism in international relations studies (Dunne 1997a and 1997b). Carr's (1946/1981) classic contribution to realism is for example viewed favourably by some critics of recent realism (Falk 1997). Still, we can say that the 'first debate' institutionalised what Clark (1989) distinguishes as two longstanding positions on the prospects of peaceful relations between states: a liberal 'tradition of optimism' and a realist 'tradition of despair'.

Broadly speaking, institutional contributions to the literature on the politics of environmental interdependence like that of Haas et al. are set within the liberal 'tradition of optimism', which is characterised by four interrelated features: first, a belief in human progress; second, a non-deterministic world-view that allows for human agency; third, a trust in rationalism in the sense that states like individuals can

behave morally and rationally towards one another; and, finally, a belief that the interests of states are complementary rather than antagonistic (Clark 1989). Stated somewhat crudely, the realist 'tradition of despair' is a pessimistic antithesis to this sanguine credo. Still, as we will see shortly, the contemporary 'neo' variants of realism and liberalism overlap in several respects.

Classic realism was concerned with questions of war and peace. States were in this respect seen as the all-important unit of analysis, and military force as the central factor. During the 1970s, however, several scholars began to question this focus and argued that world politics includes other relations than military ones and other actors than states. First published in 1977, Keohane and Nye's *Power and Interdependence* is a cornerstone in the liberal branch of this challenge to classic realism. For them, world politics involves 'multidimensional economic, social, and ecological interdependence' (Keohane and Nye 2001: 4). Moreover, such interdependencies can evolve into situations of 'complex interdependence' characterised by three features: first, that societies are connected by multiple channels of formal and informal relations between states, nongovernmental elites, and transnational organisations; second, that the agenda of interstate relations is not arranged in a clear and consistent hierarchy of issues, particularly that military security not necessarily is primary; and, third, that the use military force is of minor significance between governments in situations where complex interdependence prevails. In this perspective, cooperation rather than conflict between states is a real if not inevitable possibility, which Keohane and Nye argued could be achieved through the establishment of international 'regimes' (more recently, as we have seen, also described as 'institutions').

This was a clear challenge to the central tenets of classic realism. Yet realists like Gilpin (1987) soon acknowledged the importance of economic relations and power, which was central to the liberal argument. Moreover, if not quite like the liberals, a number of realists began to investigate the role of regimes in intergovernmental relations (Hasenclever et al. 1997). Mainstream liberals like Keohane and Nye, on the other hand, moderated what could be read as a strong critique of realism. Looking back on their influential book, Keohane and Nye (1987) is thus at pains to emphasise that their notion of 'complex interdependence' was conceived as a liberal ideal-typical opposition to a realist ideal type of world politics, but that actual world politics is set somewhere between these ideal-typical oppositions. The aim, they argue, is to move towards a synthesis of, rather than a radical disjunction between, realism and liberalism. Moreover, this reconciliation with realism was aided by many mainstream liberals' adoption of the structural approach epitomised by Kenneth Waltz's neo-realist manifesto, *Theory of International Politics* (1979). If classic realism addressed the politics of states, this neo-realism looks at the power politics between states in a system structured by 'anarchy'. In part, this explains why Haas et al. take the system of sovereign states as their starting point.

In short, therefore, the 1980s saw a rapprochement between neo-liberalism and neo-realism, which to some extent has become the mainstream of international

relations studies. This ‘neo-neo synthesis’ is characterised by a shared willingness to accept the neo-realist stress on interstate ‘anarchy’ as the structural bedrock of world politics and to investigate processes of cooperation and whether institutions matter as emphasised by neo-liberalists (Wæver 1996). Also, as a feature carried over from the ‘behavioural revolution’ of the 1950s and 60s, the rapprochement between neo-realism and neo-liberalism is facilitated by a shared commitment to ‘positivism’. Stated somewhat crudely, it is not far from the truth to say that the main remaining point of contention between neo-realists and neo-liberalists concerns what drives the actions of states. Echoing the difference between a realist tradition of despair and a liberal tradition of optimism, realists – ‘neo’ or otherwise – thus maintain that states strive for *relative* gains vis-à-vis other states, while neo-liberalists contend that states seek *absolute* gains for themselves (Wæver 1996; Hasenclever et al. 1997). In the jargon of game-theory, which is often evoked in institutionalist arguments, we can say that realists view the politics of states as a zero-sum game where a gain for one ‘player’ always entails a loss for another. Neo-liberals, on the other hand, view world politics as a plus-sum game where all can gain from participating.

This type of reasoning – which fills volumes – can be terribly technical (if not outright tedious). Yet the simple fact that neo-liberals view world politics as a ‘game’ in which self-serving states all can gain from cooperation is a significant reason for the substantial neo-liberal literature on intergovernmental environmental cooperation. Such cooperation, it is argued, can be achieved through the establishment of interstate ‘regimes’ or ‘institutions’, which usually are defined along the lines laid down by Krasner; that is, as

sets of implicit or explicit principles, norms, rules, and decision-making procedures around which actors’ expectations converge in a given area of international relations. Principles are beliefs of fact, causation, and rectitude. Norms are standards of behavior defined in terms of rights and obligations. Rules are specific prescriptions or proscriptions for action. Decision-making procedures are prevailing practices for making and implementing collective choice. (Krasner 1982: 186)

Many realists do not reject that such institutions can be established between states. But because of their belief that states weight gains against one another, and therefore are unwilling to engage in cooperation that give them a relative disadvantage, realists usually argue that a powerful state – a more or less ‘benevolent hegemon’ – must push the enterprise (Hasenclever et al. 1997). In contrast, the neo-liberals maintain that as long as all states have something to gain, institutions can be established on the basis of shared interests. In relations to environmental issues, the absence of an overarching authority in the ‘anarchical’ state-system does therefore not necessarily lead to a ‘tragedy’ of the commons or any other domain of environmental interdependence (Section 1.3). It is, as the catchy phrase goes, possible to achieve ‘governance without government’. In these terms, the neo-liberal approach to intergovernmental institutions is a large-scale variant of the wider institutionalism in the social sciences

(Scott 2001), where Ostrom (1990) provides the modern classic on local environmental institutions. The affinities between these bodies of literature can be judged from that fact that Keohane and Ostrom (1995) have co-edited an anthology on similarities and differences between 'local' and 'global' environmental institutions.

Institutions and 'the three Cs'

This, at last, brings us back to the contribution to the literature on environmental interdependence by Haas, Keohane and Levy; for although Krasner's definition is the subject of much debate (Hasenclever et al. 1997), it is essentially a 'lean' variant of his definition the authors apply:

By 'institutions' we mean persistent and connected sets of rules and practices that prescribe behavioral roles, constrain activity and shape expectations. They may take the form of bureaucratic organizations, regimes (rule-structures that do not necessarily have organizations attached), or conventions (informal practices). (Haas et al. 1993: 4-5)

In this span of institutional forms, Haas et al. focus on institutions with a bureaucratic organisation, which are investigated through seven case-studies, two of them respectively compiled by Haas and Levy. As we will see shortly, the authors' aim is to draw general conclusions on the role of intergovernmental institutions in environmental politics and we can therefore in the present context bypass the individual case-studies. For the record, however, we may note that Haas, who made his academic name on an institutional analysis of environmental cooperation in the Mediterranean (Haas 1990), provides a case-study involving the Baltic Sea (Haas 1993). The other case-studies addresses the questions of ozone depletion, acid rain in Europe, oil pollution of the oceans, management of fisheries, the use of pesticides in developing countries, and population control.

Via these case-studies, Haas et al. aim to probe the question whether international institutions 'promote changes in national behaviour that is substantial enough to have a positive impact, eventually, on the quality of the natural environment' (4). The small 'eventually' is not without significance. The authors are thus quick to point out that the institutional activities addressed in their book are relatively new and are not yet covered by 'good data about changes in environmental quality as a result of international institutional action'; therefore, they reason, 'we must focus on the observable political effects of institutions rather than directly on environmental impact' (7). Two points are lurking within this argument. First, although conveniently explained by the lack of data, the focus on institutions rather than environment is indicative for the way institutionalists like Haas et al. usually approach situations of environmental interdependence. This is a point to which we will return. Second, their emphasis on 'good data' and 'observable' political effects provides an indication of the philosophy of science guiding the study.

Haas et al. are mute on the philosophy guiding their study. Yet their language and the way they construe the study points unequivocally towards a variant of naturalism; that is, in short, the epistemological stance that social inquiry can follow the methodology of the natural sciences. This is not terribly surprising considering the general naturalist aspirations of neoliberal institutionalism (Hasenclever et al. 1997), and the fact that one of the authors, Keohane, has coauthored an influential textbook on ‘scientific inference’ in social inquiry (King et al. 1994). Proponents of this epistemological stance in international relations studies often describe their approach as ‘rationalism’, while their critics usually portray them as ‘positivists’.⁷ For our purpose, however, we can say that Haas et al. are embedded in what Flyvbjerg (2001) outlines as the natural science ideal of theorising.

Leaning on Hubert Dreyfus, Flyvbjerg summarises the natural science ideal of theorising into six points according to which a theory must be: (1) *explicit* in a way that does not allow for interpretation or intuition; (2) *universal* in the sense that it must apply independent of time and space; and (3) *abstract* by not requiring reference to concrete examples. Furthermore, if related, a theory must be: (4) *discrete* by being formulated only with the aid of context-independent elements, and (5) *systematic* by making up a whole in which the context-independent elements are related to each other by rules or laws. Finally, a theory must be (6) *complete* and *predictive*: ‘The way a theory accounts for the domain it covers must be comprehensive in the sense that it specifies the range of variations in elements, which affect the domain, and the theory must specify their effects. This makes possible precise predictions’ (Flyvbjerg 2001: 39). In short, the ideal is to provide general, context-independent explanations aimed at predictions.

Haas et al. do not refer to these points, of course, and their study falls short of satisfying the ambitious programme of the natural science ideal of theorising. In fact, as we will see, the authors are well aware of this. Yet they do their best. For a start, Haas et al. fashion a common design for the individual case-studies, which concentrate on what the authors consider as three analytically distinct phases of policy activity: agenda setting, international policies, and national policy responses. Although not stated in those words, the aim of this framework is clearly to facilitate abstraction from the contextual cases in order to draw context-independent conclusions that can be used for predictions, i.e. policy prescriptions. To be sure, each case-chapter is introduced by a description of the specific environmental problem, and the chapters are also concluded by an assessment of the role international institutions played in the particular cases. But the emphasis is clearly on the policy activities,

7. Partly because of the rapprochement between neo-realism and neo-realism noted above, it is now common to distinguish a ‘forth debate’ between a ‘rationalist’ mainstream and an ensemble of ‘reflectivist’ perspectives (Figure 2.1; Wæver 1996; Smith 1997). Tellingly, it was Keohane (1988) – the ever-present doyen of the mainstream – who introduced this differentiation. Although partly about different perspectives on the nature of world politics, the ‘fourth debate’ is mainly about radically different approaches to epistemology. As we will see in the next section, the contribution by Kuehls represents one variant of ‘reflectivism’.

particularly the formation of international policies; the role of the case-studies is to provide 'descriptive analysis' aimed at establishing of a 'causal analysis' of institutional effectiveness.

The 'causal analysis' Haas et al. construe consists of identifying three 'causal pathways', which they see as fundamental for the establishment of effective international environmental institutions. First, governmental concern must be sufficiently high to prompt states to devote scarce resources to solve a particular environmental problem. This is primarily seen as a 'domestic' issue where mass media, nongovernmental organisations, and industry groups are important. Yet, the authors conclude: 'international institutions can increase concern about environmental policy, when conditions are right' (401). Second, the 'contractual environment' must be hospitable. By this Haas et al. mean that governments must be able to make credible commitments, establish common rules with reasonable ease, and monitor one another's behaviour. Effective international environmental institutions, the authors argue, can provide such hospitable contractual environments by functioning as 'bargaining forums in which information is shared, thereby reducing the transaction costs of negotiating agreements' (401-2). Finally, states must have the necessary political and administrative capacity to implement the norms, principles and rules of an international environmental institution domestically. Summarised as concern, contractual environment, and capacity, the authors label these 'causal pathways' the 'three Cs'.

From this, by way of conclusion, Haas et al. ask rhetorically: 'Is it possible to mitigate environmental problems without abrogating state sovereignty?' If not quite a surprise for the reader, the authors appear a little startled by their own response: 'Rather surprisingly, the answer seems to be a cautious yes' (424). The clue is, of course, that international (environmental) institutions can work in spite of state sovereignty. But what makes the authors cautious about their conclusion?

First, international institutions are for Haas et al. often 'necessary' for effective environmental action; but they are 'certainly not sufficient' (5). In fact, the authors recognise that such institutions can be meaningless and may even do more harm than good. The trick is whether international environmental institutions are 'effective'. Haas et al. are somewhat vague on what they mean by 'effective'. The most straightforward answer would be that institutions are effective if the environmental problem they target is mitigated. But we have already seen that the environmental impact of institutions is an issue the authors dodge from the start. While they explain this by the lack of 'good data', we may note that many if not most institutional analyses also evade the question of environmental impact (Stærdahl 2000). What matters is the 'observable political effects' of institutions. This is still rather vague and could imply, for example, that the effectiveness of an institution can be gauged by states' ability to report according to an agreed schedule. Yet that is largely where Haas et al. stand; whether institutions matter is bound up with political effectiveness, and effectiveness is in turn premised upon 'the three Cs' – 'The impact of international institutions lies in their performance of three catalytic functions: increasing govern-

mental concern, enhancing the contractual environment, and increasing national political and administrative capacity' (424).

If the first reason for the cautious conclusion by Haas et al. has to do with their focus on institutional effectiveness, the second reason cuts deeper and concerns the authors' philosophy of science. Haas et al. find that 'certain conclusions emerge quite strongly, and we present them here as our modest advice to architects of international environmental institutions' (409). Yet they admit that their conclusions are based on a 'small sample of cases, which were not scientifically chosen' (409). Again, considering their repeated calls for scientific rigour, Haas et al. are a little vague on the premisses for this statement. In part, however, their caution seems related to their limited focus on institutional effectiveness: 'For a deeper social scientific study capable of reaching valid causal inferences,' Haas et al. suggest, 'comparative analysis of environmental issues, on the basis of an analysis of characteristics that make cooperation more or less difficult, would be essential' (418). Yet I suspect that the real cause for their caution relates to what could be termed validity in volume: 'enough knowledge to support valid generalizations will only be generated if many researchers, using similar concepts and methods, work simultaneously in different parts of the world' (419). In other words, to satisfy the ambitious programme we have outlined as the natural science ideal of theorising, Haas et al. not only call for more research, but more research along the lines suggested by them. Many researchers have heeded this call, but I am yet to see the serious institutionalist study that claims to have established 'valid generalizations'; a recent collection of institutional case-studies, which is confident enough to draw statistical inferences from the cases, is for example at pains to emphasise that 'we make no claim whatsoever that our set of cases is in some sense a *representative* sample of the universe of international regimes' (Underdal 2002: 38). This may serve as an example of what Sayer more generally recognises as a major impediment in much of the social sciences:

So much that has been written on methods of explanation assumes that causation is a matter of regularities between events, and that without models of regularities we are left with allegedly inferior, 'ad hoc' narratives. But social science has been singularly unsuccessful in discovering law-like regularities. (Sayer 1992: 2; also Flyvbjerg 2001)

The reader is not entirely mistaken if he or she detects more than a pinch of criticism on and between the lines in this presentation of the study by Haas, Keohane and Levy. Yet the purpose of this section – and the next section on the contribution by Kuehls – is not to render a thorough critique. Rather, the primary aim in presenting these contributions is to provide a backdrop for the approach I will adopt, and the theme I will pursue, through the next chapters; the study by Haas et al. and the institutional perspective they represent have in any case been the object of several critical essays (e.g. Hovden 1999). Yet I cannot leave Haas et al. without noting how they, like many other institutionalists, in their quest for 'scientific rigour' end with

commonsense conclusions. It is hardly a revelation for the ‘leaders and designers of international institutions’ they seek to assist, for example, that effective institutions are facilitated by governmental concern, a hospitable contractual environment, and capacities to implement domestic adjustments (‘the three Cs’). A quest for scientific ‘rigour’ can all too easily end in scientific *rigor mortis*! Reading this contribution to the literature on the politics of environmental interdependence, one begins to understand Wæver’s (1996) assertion that the institutional approach in international relations studies is precariously close to the ‘border of boredom’.

2.2 The Critical Assessment of Political Space

Critical approaches drawing on an assortment of methodologies opposed to the natural science ideal of theorising are in Wæver’s (1996) appraisal often at the ‘border of negativity’ – all they can do is to deconstruct and criticise. I will leave it to the reader to judge whether this is the case for Kuehls’ contribution to the literature on the politics of environmental interdependence, the promisingly titled book *Beyond Sovereign Territory – The Space of Ecopolitics*.⁸ It is certain, however, that his approach is as different from that of Haas et al. as one almost can imagine. In handy if simplistic dichotomies, Kuehls not only presents a ‘critical’ alternative to ‘problem-solving’ approaches, he also falls squarely within the camp of ‘reflective’ as opposed to ‘rational’ perspectives in the schism said to dominate contemporary international relations studies (Figure 2.1).

The critical purpose, which is to say his determination to question the existing order of things, is the hallmark of Kuehls’ study when he sets out to ‘examine political space through a focus on the politics of ecology, or ecopolitics’ (ix). But it should from the start be acknowledged that the order Kuehls strives to question in the first place is a textual one, and so is the criticism he puts forward. Each chapter is thus based on a critical reading of one or two influential expositions on the issue he strives to confront. And his critical alternative is in turn, chapter by chapter, grounded in the summoning of a leading ‘dissident’ philosopher or social theorist. Kuehls’ discussion is, in other words, highly abstract and often (deliberately) nebulous. This is a feature Kuehls shares with several of his fellow intellectual travellers, and is a point to which we will return. Presently, we shall focus on Kuehls’ argument, which can be summarised into three keywords: sovereignty, governmentality and ethics.

Sovereignty, or more precisely a critical engagement with the type of territorial state sovereignty we have met as the modern geopolitical imagination (Section 1.1), is arguably the central component in Kuehls’ argument. With our conceptualisation

8. The spatial terminology and the play on ‘geopolitics’ may – to some extent – account for Kuehls’ popularity as a reference in current political geography. This popularity, and the fact that Kuehls’ attention to space by no means is confined to the title, is a weighty reason for my selection of his contribution for closer scrutiny.

of environmental interdependence as a tension between environmental and political spaces simmering in the background (Chapter 1), Kuehls argues:

when the *ecology of areas* is taken seriously, that is when the manner in which various eco-systems slice across geopolitical boundaries is highlighted, territory becomes much less of a fixed, static entity and claims of sovereignty over it become increasingly problematic. (Kuehls 1996: x, italics added).

Kuehls could thus be seen as a proponent of the ‘erosion-of-sovereignty’ thesis on the sovereignty-environment nexus mentioned in the opening of previous section. This claim is based on a very cursory case-study of Brazilian rainforest policies, which in the concluding chapter is extended with a slightly more detailed discussion of the political struggle over ‘Brazil of the North’ – the temperate rainforests of Clayoquot Sound in British Columbia. But that does not prevent Kuehls from opening his exploration of sovereignty with the statement: ‘If we are interested in the space of ecopolitics, surely we are interested in the space of the state’ (25).

To this end, Kuehls launches a critique of two influential and reasonably recent international relations theorists, Kenneth Waltz and Hedley Bull, whom he identifies as respectively the originator of ‘neo-realism’ and a champion of ‘neo-idealism’; they are, in other words, identified as representing opposing positions in the longstanding idealism-realism schism within international relations studies (Figure 2.1). This selection is somewhat peculiar. First, while Waltz certainly is the obvious choice for a proponent of neo-realism, the selection of Bull as a ‘neo-liberalist’ is unusual – and in my view mistaken. Many would thus regard Bull as belonging to the realist tradition, although in a notably different manner than Waltz (Falk 1997). Second, the selection of Waltz and Bull is odd considering that they have little or nothing to say about environmental issues. In fact, Kuehls ignores the substantial literature on environmental issues in international relations studies, not least the institutional approach like that of Haas et al. (Section 2.1). Their kind of institutionalism would be a far more obvious (and relevant) example of ‘neo-liberalism’, particularly as the criticism levelled at Waltz and Bull is just as applicable to most institutionalism.

This been said, we can turn to Kuehls’ criticism of these pillars in international relation theory, which revolves around the way in particular Waltz construes an unambiguous relation between sovereignty and territory in order to establish a firm foundation for an explanatory theory. The modern geopolitical imagination of a world divided into discrete territories of state sovereignty is, in other words, taken for granted to satisfy what we in the previous section termed the natural science ideal of theorising. This criticism of conventional international relations theory is not terribly original, of course, but is a staple feature of both ‘dissident’ international relations studies and most contemporary political geography (Walker 1993; Agnew 1994). In Kuehls’ study, the criticism is evoked to point out that in linking ‘the state (and ultimately politics) to the space of sovereign territories’ (36), conventional theory ‘eliminates the interrelatedness of political reality that exists within and

between these geographic boundaries and the rich ambiguity of political existence that swirls about inside the territorial boundaries of the sovereign state' (33-4).

Ecological processes exemplify this 'rich ambiguity' of political space, which, we are repeatedly reminded, exhibits just how 'pathetically porous' state boundaries are. Such spaces, Kuehls argues with extensive recourse to Gilles Deleuze and Félix Guattari, should in a metaphorical sense be thought of as a 'rhizome' – 'a system of roots and shoots that grow along or under the ground, extending in many different directions, reaching into many different spaces' (38). The theories of Waltz and Bull, on the other hand, are in the metaphorical vocabulary of Deleuze and Guattari seen as 'arboreal – treelike'. This is an appropriate metaphor, Kuehls argues, because Waltz and Bull treat the territorial state as if it were a tree with roots sunk deep into the ground of a fixed place, and 'a single trunk that branches out, sending aspects of itself away from the center while always remaining connected to a unified trunk' (38). In effect, Kuehls elaborates, Waltz and Bull produce a 'monoculture politics' in which 'the sovereign territorial state' is reified as '*the* political unit' (39).

Kuehls basks in the metaphor-infused universe of Deleuze and Guattari. But to bring out his argument on sovereignty and the space of ecopolitics, we can do with the most explicit spatial terms Kuehls borrows from them. The point of thinking in terms of 'rhizomes' is thus to extricate thought from 'arboreal' state models. Such models involve a 'striated space' of states. Rhizomatic thinking, on the other hand, suggests 'a reality where everything is connected to everything else' and is 'not centered around a specific point of view' (38-9). This is the 'smooth space of the not-state' (42), which for Kuehls is the space of ecopolitics. Therefore, he argues: 'ecopolitics cannot be waged solely within the striated space of the state or its corollary interstate system. It must be waged elsewhere' (49). This 'elsewhere' is somewhere in 'smooth space', of course. But because of his commitment to rhizomatic thinking, we may assume, Kuehls only suggest its 'not-state' location in vague terms. Yet he evokes Greenpeace as an example of an activist organisation, which successfully has taken ecopolitics to the 'smooth space' where it belongs.

This reading of sovereignty, or, rather, the ecopolitical destabilisation of conventional conceptions of sovereignty, is central to Kuehls' argument. But to bring out the general spirit of his approach, we should also take a look on Kuehls' argument on governmentality and ethics. While his discussion of these issues does not quite clarify the ecopolitics he has in mind, it does at least provide a hint.

Extending his criticism of Waltz and Bull for reifying the territorial state as *the* political unit in world politics, Kuehls argues that the problem of ecopolitics cannot be subsumed to discussions of sovereignty – the 'outside' of the state. The problem of ecopolitics is also about the 'inside' question of government; that is, the ways in which 'a particular political institution known as the sovereign state relates to its territory and population, how it must shape both in order to become a sovereign state' (58). This proposition is based on Foucault's (1991) notion of 'governmentality', which, in brief, suggests that the realm of the state during the sixteenth century was

extended from simply being about the demarcation of sovereign territoriality and the imposition of law to concern the welfare and character of the population. Kuehls illustrates this through a directive by the governor of Portuguese America, which in 1757 gave instructions for ‘civilising’ the ‘Indians’ by making them productive ‘citizens’ through intensive use of their lands. From this he concludes in more general terms that the ‘problem of providing for the welfare of the population has brought the state directly into contact with its territory’ (72). Nature and specific populations within the territorial bounds of the state are thus ‘remade’ under the imperatives of ‘national development’, which today also is the imperative of global capitalism. As a result, however, little attention is paid to the complex cultural and spatial relationships that makes up specific (rather than state-territorial) places. Therefore, Kuehls argues for a reorientation to ‘otherness that allow for a reverence for difference rather than an eradication of it’ (87). This is still rather vague. Yet ‘First Nations’ – indigenous populations – and their particular ways of interacting with nature are clearly the sort of difference Kuehls finds to be eradicated by governmentality. Kuehls is not alone in this celebration of ‘difference’. Doran argues, for example, that a primary objective for a critical global environmental politics is ‘the rehabilitation and recognition of marginalized and subjected local knowledge systems’ (Doran 1995: 204). Indeed, the accentuation of ‘difference’ has become a trademark of much if not most critical social inquiry, including critical geography (Jacobs 2000).

This leads us to the question of ethics, for Kuehls reverence for difference is not confined to human societies, but extends to nature as well. The first chapter of his book is thus devoted to establish an ‘eco-ethics’. Like many others (Section 1.2), Kuehls evokes George Marsh’s *Man and Nature* as one of the first environmentally conscious, or ecological, works. He is by Kuehls credited for having argued that humans had become a destructive force in nature, but is immediately criticised for being unable to entertain the possibility that the world was not designed with humans in mind; Marsh and many contemporary environmentalists, Kuehls claims, are caught in a human-directed conception of nature. To counter this view, Kuehls summons Friedrich Nietzsche to establish a ‘Nietzschean eco-ethics’. This is truly a surprising choice, not least, as Kuehls himself admits, because Nietzsche can be read as an anti-ecologist. For Kuehls, however, ‘Nietzsche’s insistence that the world is, in all eternity, chaos, is an insistence that our categories, our interpretations, do not exhaust the world. Nature is always different’ (9). This does not cut us loose to do what we want, as some might read Nietzsche, but ‘inserts a profound and troubling element of caution, that in our actions we may be imposing our design and interpretations on the world and the vast diversity of life that occupies it along with us’ (22). This caution is justified, because from ‘Nietzsche’s perspective, the earth in no way belongs to us. It was not placed here for us to use. We are, instead, only one of billions of all-too-brief occupants of an eternally chaotic world’ (22).

What this implies for policy is the task to which Kuehls devotes the final chapter before his extended conclusion. To this end, and not surprisingly given his attention to sovereignty and practices of governmentality, Kuehls picks out – and rejects – two contributions to the ecopolitical field of thought, which have widely different views of the role of the state. On the one hand, William Ophuls is thus rejected because his remedy to environmental problems is more of the very kind of state governmentality, which Kuehls has criticised. On the other hand, and more surprisingly, he is equally critical of Murray Bookchin's anarchist approach. Both, Kuehls contends, 'fail to address certain aspects of the space of ecopolitics that I have been arguing are crucial' (94); they are, from radically different perspectives, too caught up in the politics of sovereign territory. Moreover, as respectively 'mechanistic' and 'organic' theorists of nature and society, Ophuls and Bookchin are, in Kuehls' opinion, 'unable to come to terms with the (post-)Nietzschean reconceptualization of nature, humanity, and politics' (94). Instead, Kuehls wholeheartedly embraces Donna Haraway's idea of the 'cyborg' – a hybrid of machine and organism. I shall spare the reader for an extrication of Kuehls' cyborg ecopolitics, which, more rather than less, is a repetition of the arguments we have already encountered. The central point of the exercise, it seems to me, is for Kuehls to stress that 'Ecopolitics is not about one perspective' (113); it is a vision of nature that 'confounds theories that place human beings in an ontologically privileged position' (114). In the end, Kuehls' ecopolitics is therefore not that different from most reasonably radical branches of green political thought, which if anything is about challenging anthropocentric conceptions of nature (Dobson 2000).

Curiously, but in view of our previous discussion of ecosystems also interestingly, Kuehls' most concrete policy proposal is the notion of 'sustainable ecosystem management', which he finds to have lines of affinity with his Nietzschean eco-ethics (128-9). Kuehls is well aware that the term 'management' is a 'red-flag term' among environmentalists. But he is apparently unaware of the fact that the term 'ecosystem' often is endowed with both mechanical and organic connotations (Section 1.2). And mechanical and organic conceptions of nature are exactly what Kuehls strives to avoid in his Nietzsche-Haraway inspired eco-ethics.

By way of conclusion, Kuehls sums up more straightforward than he mostly argues, 'My claim is that the problem of ecopolitics cannot be reduced to either domestic or international policy – that we need to think the space of ecopolitics beyond sovereign territory' (117). But, he concludes more nebulously, 'Thinking society beyond both sovereign territorial boundaries and species boundaries means taking into serious consideration the ambiguity, contingency, and diversity of life. The problem before us demands no less' (130).

Even in this abbreviated form, international relations scholars should readily recognise Kuehls as a party to the 'postmodern' camp within the larger 'reflectivist' opposition to the 'rationalist' mainstream (Figure 2.1). In fact, one does not have to be an international relations scholar to perceive his philosophical underpinnings. Simply the list of intellectual figures Kuehls evokes extensively (and uncritically) is

thus a near canon of ‘postmodern’ thinking. Presented more generally as ‘constructionism’, this is a mode of reasoning to which we will return in Chapter 4.⁹ For the present, we shall merely recognise that this mode of thought involves anti-foundationalist epistemologies and, as often as not, anti-essentialist ontologies; that is, in the first instance, positions that reject claims to ‘true’ knowledge and, in the second, hold that phenomena or event cannot be reduced to certain fixed properties that determine their character. For the ‘true’ constructionist it is thus impossible to distinguish between a knowing subject and a known object, and the world becomes one of fluidity and chaos, contingency and difference (to use but a few of the terms that crops the pages of Kuehls’ study). This makes for a particular emphasis on the role of language, both as a means to maintain and resist power. It is in this light that one should see Kuehls’ meticulous deconstruction of conventional modes of thinking. Also, in a charitable reading, his virtual orgy of metaphors and vague suggestions should in this vein be seen as an active tool to destabilise (if not shatter) established meanings to ‘conceive of new possibilities, avenues, and alliances’ (49). I do not buy this packet in full. But as we will see shortly, my approach is surely more akin to that of Kuehls than that of Haas et al. discussed in the previous section. Many of Kuehls’ basic arguments are thus interesting, if not quite original, when they are disentangled from his nebulous style. In fact, the question of style can partly explain the irritation the reader might have detected in my synopsis of Kuehls’ study. I can fully follow Burr when she on constructionism in general admits ‘that I consider a fair amount of what is written to be unnecessary difficult and obscure’ (Burr 1995: 16).

2.3 Environmental Interdependence as Geopolitics

It should by now be clear that the two contributions to the literature on environmental interdependence outlined in the preceding sections are worlds apart.¹⁰ As for their *purpose*, Haas, Keohane and Levy thus provide an archetypical sample of a ‘problem-solving’ approach in the sense that they reason about how to deal with particular problems within the existing order, while Kuehls for his part is a no less archetypical exponent of a ‘critical’ approach in his questioning of that very order.

9. Spearheaded by Wendt (1992), the term ‘constructionism’ has in international relations studies come to signify a philosophical position, which is less radical than the stance it often connotes in other social sciences. The middle-ground position of Wendt is particular evident in his recent book, which, in my view mistakenly, seeks to combine his constructionism and ‘scientific realism’ (Wendt 1999). Following Smith (1997), ‘constructionism’ is therefore in Figure 2.1 placed between the ‘reflectivist’ and ‘rationalist’ camps in the so-called ‘fourth debate’.

10. The following accentuation of purpose, method and object is inspired by Sayer who stress that: ‘Methods must be appropriated to the nature of the object we study and the purpose and expectations of our inquiry, though the relationships between them are sometimes slack rather than tight. If we imagine a triangle whose corners are method, object and purpose, each corner needs to be considered in relation to the other two’ (Sayer 1992: 4). It should be noted that the questions Sayer would ask in respect to ‘objects’ are more demanding than those posed in the present context (e.g. Sayer 2000: 16).

Concerning *method*, understood broadly as including philosophy of science, the contributions are equally at odds as Haas et al. and Kuehls respectively locate their analyses in the 'rational' and 'reflective' branches of contemporary international relations studies (Figure 2.1); that is – broadly speaking, in wider social-theoretical perspective – approaches that respectively follow a natural science ideal of theorising and constructionism. Finally, when it comes to their conceptualisation of environmental interdependence as an *object*, we again find a marked difference, but also a somewhat startling similarity, between the contributions by Haas et al. and Kuehls. This question of how the two contributions approach to environmental interdependence as an object is the starting point for this section, which is intended to set the stage for the analysis to be pursued in the following chapters.

Political and Environmental Spaces Revisited

To address the question of how Haas et al. and Kuehls approach environmental interdependence as an object, we may recall our previous conceptualisation of environmental interdependence as a tension between two radically different notions of space: the modern geopolitical imagination of a world divided into discrete territories of sovereign states, and the more recent vision of Earth as made up of spatially nested ecosystems (Chapter 1). If not quite in these terms, this tension looms large in the study by Haas et al. as well as that of Kuehls.

In respect to Haas et al., the issue is fairly straightforward: they, like most institutionalists, simply take spatiality of situations of environmental interdependence for granted. On the one hand, we have thus seen how Haas et al. accept the territorial state as the given 'political space' in the politics of environmental interdependence. On the other hand, if more tacitly, they also accept the 'environmental spaces' they analyse as unproblematic givens. To be sure, the environmental issues addressed in the individual case-studies of the anthology are outlined. But this is merely background description. The full weight of their analysis lies on the political process of institution-building. Haas et al. could just as well have analysed institutions for international trade; tellingly, particularly in the perspective of this study, the author of an institutionalist analysis of Baltic Sea environmental cooperation remarks: 'While regional environmental policies might be somewhat more complex, they are essentially similar to other policies' (Ringius 1996: 31). Hovden (1999) has a point, therefore, when he notes that institutionalists often act 'as if nature doesn't matter'.

Now, it would be more than a little presumptuous to claim that analysts such as Haas et al. are not driven by genuine concerns for the environment. Rather, their neglect for the environment as an important variable in its own right should probably be seen as a consequence of institutionalists aspiration to construe general, issue-independent theories. This been said, however, we should for the present purpose in particular note that the marginal attention to the environment also extends to the spatiality of environmental issues. Haas et al. recognise that international environ-

mental institutions can relate to transboundary issues, problems relating to the commons, and even issues within a single state territory (cf. Section 1.3). But these distinctly political-geographical categories are simply evoked as, well, categories. The spatiality of environmental problems is in this way naturalised, i.e. treated as if – in this context literally – handed down from nature.¹¹

The position of Kuehls is more ambiguous. He, and virtually all critical scholars with him, can hardly be criticised for taking the territorial state and the associated state-system for granted. Quite the contrary: ‘If anything distinguishes the critical school from the mainstream,’ Laferrière and Stoett (1991: 11) note, ‘it is the rejection of the state as the solution to modern problems’. The central purpose of Kuehls’ study is thus to emphasis that the ‘space of ecopolitics’ does not belong solely or even mainly to the realm of the territorial state and the associated state-system; the modern geopolitical imagination is by no means taken for granted. Curiously, however, this critical assessment of ‘political spaces’ is not matched in Kuehls’ approach to ‘environmental spaces’. For sure, Kuehls construes an elaborate ‘eco-ethics’. But this eco-ethics, and his deconstruction of state territoriality, is based on the assumption that what he in passing terms ‘the ecology of areas’ somehow opens a ‘smooth’ space that defies the ‘striated’ space of territorial states. The assumption about an ‘ecology of areas’ is never subjected to a critical analysis but is simply taken for granted.¹²

If Haas et al. use environmental interdependence as a convenient ‘issue-area’ to develop general theory on international institutions, Kuehls can thus be seen to use environmental interdependence as a suitable *problématique* to attack conventional state-territorial modes of thinking. In neither case is the spatiality of the environmental facet in the tension between environmental and political spaces accorded much if any attention; the environmental spaces of their analyses are, for very different purposes, treated as given or self-evident geographical objects.

The Politics of the Geographical Specification of Politics

‘[G]eography does not argue. It simply is’ (Spykman 1938b: 236). This is the legendary maxim Spykman used to conclude his classic double-article on geography and foreign policy. By implication he also provided a precis of the geopolitical mode

11. It should be noted that some scholars affiliated to the institutional perspective in recent years have begun to address the spatiality of environmental problems (e.g. Gibson et al. 1998). But in keeping with their commitment to the natural science ideal of theorising, these scholars approach the issue in very different terms than those I will propose (Chapter 4).

12. This been said, I do believe that Kuehls’ attention to ‘political space’ at the expense of ‘environmental space’ happens be a forgivable default rather than by deliberate design. In relation to the discourse-analytical subset of constructionism, Neumann (2000) argues that in doing a discourse analysis of something one must often pay the price of making an object of something else. This may also hold for constructionist analyses in a wider sense. For Kuehls, at least, one could argue that his *de facto* objectification of ‘environmental spaces’ is a regrettable but almost inescapable consequence of his focus on the deconstruction of ‘political space’.

of reasoning, according to which politics is a sphere of uncertainty and change that 'argue', while geographical factors represent what 'simply is' – the permanent and objective. For Spykman, and other more or less explicit proponents of geopolitical reasoning before and after him, geography is therefore 'the most fundamentally conditioning factor in the formulation of national policy because it is the most permanent' (Spykman 1938a: 29).

Constructionist scholars like Kuehls would be fiercely critical of statements as foundational and essentialist as those of Spykman. Still, what I have sought to show is that even Kuehls, in spite of his critical appreciation of space, proceeds as if the geography of the environment 'simply is'. As foot-noted above, this is probably an unintended consequence of his and other critical scholars focus on the destabilisation of conventional assumptions of political space – that is, the modern geopolitical imagination of a world divided into discrete territorial states. The critical geopolitics of environmental interdependence at which I am aiming does not reject this critical appraisal of political space; in fact, it could even admit a place for institutionalist analyses. Rather, my aim is to extend the critical analysis to the neglected or taken-for-granted geography of 'environmental spaces' in the spatial tension that makes up environmental interdependence.

For a start, at least, this undertaking is inspired by what political geographers over the past decade or so increasingly have discussed under the banner of 'critical geopolitics'. This body of literature strives to undermine geo-determinist modes of reasoning by showing that geography by no means is a neutral factor in politics; with reference to Spykman's geopolitical maxim, Ó Tuathail argues: 'To claim an "is" is already to argue. The foundations of geography are not rock solid and neutral but fully social and inescapably political' (Ó Tuathail 1996: 53). In their pioneering article, Ó Tuathail and Agnew therefore suggest that geopolitics should

be critically re-conceptualised as a discursive practice by which intellectuals of statecraft 'spatialize' international politics in such a way as to represent it as a 'world' characterised by particular types of places, peoples and dramas. (Ó Tuathail and Agnew 1992: 192; also Ó Tuathail 1996: 57-63; Agnew 2003: 3)

This has proved an influential conceptualisation of the practice of critical geopolitics, which, conjointly with Taylor's (1993) very different reformulation of world politics in terms of world-system analysis, has pushed geopolitics to the front of contemporary political geography. But the equally pioneering conception by Dalby may be more to the point:

To construct critical political geographies is to argue that we must not limit our attention to a study of the geography of politics within pre-given, taken-for-granted, commonsense spaces, but investigate *the politics of the geographical specification of politics*. That is to practice critical geopolitics. (Dalby 1991: 274, *italic added*)

The aim of critical geopolitics is, in other words, to destabilise the conventional understanding of geopolitics. This involves pulling the rug under assumptions that take geographical factors such as location, distance, or, indeed, 'environment' as a neutral ground for the construction of 'objective' analyses of causalities in politics. Rather, 'Simply to describe a foreign-policy problem is to engage in geopolitics, for one is implicitly and tacitly normalizing a particular world' (Ó Tuathail and Agnew 1992: 194). Geopolitics is therefore to be analysed as the production of geographical knowledge, which is embedded in particular interpretative communities and thus inevitably political.

In this spirit, I will propose that the politics of environmental interdependence should be approached as a particular articulation of geopolitics. This geopolitics involves assumptions about 'political spaces' – be that state territories or 'different' spaces and places. But the geopolitics of environmental interdependence also entails assumptions about 'environmental spaces'. This is the topic I will pursue through the following chapters, for it is my contention that the identification of environmental spaces involves subtle geographical specifications of politics, which are no less political those involved in the demarcation of political spaces.

Surely, I am not the first, and hopefully not the last, to suggest that environmental politics can be approached critically in geopolitical terms. Following the lead of the critical geopolitics he helped to conceive, Dalby (1992) thus sees a need to scrutinise 'ecopolitical' discourses both in respect to 'the conceptual infrastructure of academic debates about global change, and the practical reasoning used to legitimize government and NGO policy' (517). The theme of 'environmental security' is in this respect offered as a first step, which Dalby subsequently has pursued and developed (e.g. Dalby 2002). For his part, Luke (2000) discerns parallels between classic geopolitics and some strands of contemporary environmental reasoning. More specifically, he argues that organisations like Worldwatch Institute propagate a new brand of 'green geopolitics' that 'would complete the logic of Mackinder's ethno-centric imperialist vision by globalizing its administrative reach all the way down to the last microorganism in the remotest biome of the Earth's biosphere' (356). Most recently, and in close alignment with developments in critical geopolitics, Castree (2003) proposes a framework for analysis of 'environmental geopolitics' based on the argument that 'there is a geopolitics to how environmental problems are represented' (427). From this, Castree identifies two 'geopolitical environmental discourses': the discourse of 'global environmental management' advanced by people like Al Gore, and, like Dalby, discourses of 'environmental in/security'.

These contributions, which I believe to be fairly representative of the limited field of critical environmental geopolitics, all have their distinct merits, and in particular Castree's argument is ostensibly very close to my concern. Like Kuehls, however, the 'geo' of their critical geopolitics is most distinct when it comes to engagements with assumptions and practices relating to the Westphalian system of territorial states. In respect to the environment, on the other hand, they concentrate

on the discursive construction of meanings, which in spatial terms does not go much beyond allusions to transgressions of state boundaries. This is not a problem in itself. The attention to environmental discourses is thus well in line with the wider literature on the politics of environmental discourses, which also play a role in my argument (Section 4.1). But in their focus on rather abstract discursive representations of space, the few existing examples of critical geopolitical approaches to environmental issues bypass more concrete spatial manifestations in the geopolitics of environmental interdependence. There is, as Paasi notes on the wider field of critical geopolitics, a tendency to engage in a kind of ‘remote sensing’ of geopolitics. ‘The realm of representations is important,’ Paasi concedes, ‘but its links with practices and historically contingent material conditions are of particular importance’ (Paasi 2000: 284; also Heffernan 2000).

I share this congenial criticism, and it is partly for this reason that I only take the opening for my argument from critical geopolitics. The notion that there is a politics to the geographical specification of politics is important as it invites us to challenge taken-for-granted assumptions about geography in politics. And the spatiality of the environment in situations of environmental interdependence is exactly, as I have tried to show, more often than not taken-for-granted. But to move beyond the deconstruction of taken-for-granted representations of geography in politics, we must look elsewhere than the current practice of critical geography. I will in this respect turn to another concern in current geography, the critical investigation of scale, which in my reading offers a promising way to conceptualise the geopolitical identification (or objectification) of environmental spaces (Chapter 4). And to discuss the possible institutionalisation of such space, I will subsequently move to a somewhat older concern in human geography, the ‘new’ regional geography (Chapter 6).

Before leaving the realm of critical geopolitics, however, we should take note of the useful distinction between different types of geopolitical reasoning it has engendered. In their seminal article, Ó Tuathail and Agnew (1992) recognise two types of geopolitical reasoning among ‘intellectuals of statecraft’: first, the *formal* geopolitics of strategic thinkers and public intellectuals who establish themselves as authorities on the conduct of statecraft; second, the more prevailing *practical* geopolitics of political practitioners. Ó Tuathail (1999) has subsequently expanded these rather elite-oriented types with the *popular* geopolitics of public culture and mass media, and the *structural* geopolitics involving the study of structural processes and tendencies that condition how all states practice foreign policy.

Methodological signposts

These types of geopolitical reasoning can all be found in environmental politics. This chapter has for example been about formal environmental geopolitics, which, of course, can be ‘problem-solving’ as well as ‘critical’. Indeed, by exploring how the ‘environment’ in situations of environmental interdependence is identified and

institutionalised as political-geographic objects, the purpose of this study is to provide a critical contribution to formal environmental geopolitics.

In the understanding of Cox (1981) introduced in the opening of this chapter, a critical approach implies – for a start, at least – a questioning of the existing order of things, or, in the more contemporary phraseology, a destabilisation of the taken-for-granted. In this study, this questioning is primarily about probing the usually assumed spatiality of the ‘environment’ in situations of environmental interdependence. The next step in a critical analysis could be to ask how the existing order may be changed, and how that change may be influenced or challenged. I share this ambition on a general level, and we will in somewhat different terms return to the question in Chapter 6. Yet it should from the start be acknowledged that a critical analysis not necessarily entails a call for change. One may critically probe an aspect of reality and find that things are not as usually expected, and yet conclude that the state of things is not inherently ‘bad’. In the words of Foucault, ‘A critique is not a matter of saying that things are not right as they are. It is a matter of pointing out on what kinds of assumptions, what kinds of familiar, unchallenged, unconsidered modes of thought the practices we accept rest’ (Foucault 1988a: 154).

To ground our critical forage into formal environmental geopolitics, we shall investigate an example of practical environmental geopolitics – the development of intergovernmental environmental cooperation in the Baltic Sea area. In some quarters of academia, a single case-study like that is often viewed as merely a tool to generate hypotheses, while the real leap into science is seen to occur when one can generalise from a large number of cases. Considering the extent to which Haas, Keohane and Levy seek to draw general inferences from the seven cases of their study, we can probably safely conclude that they are proponents of this view, and it is the stated position of the methodological textbook coauthored by Keohane (King et al. 1994). In important respects, this position rises from their natural science ideal of theorising, which, as previously noted in this chapter, emphasises the production of context-independent knowledge. This is not the place to rehearse the good arguments for an emphasis on context-dependent knowledge in social research; that is, a methodology accentuating the value of even a single case-study (Flyvbjerg 2001). The best argument may in any case be pragmatic: as noted in respect to the study by Haas et al., the quest for context-independent ‘valid generalisations’ never seems to succeed.

Yet, if not altogether unconnected, the case for a single case-study also relates to the abstract or ‘theoretical’ ambition one may entertain. To approach this issue, we may from Sayer (1992: 50) derive a useful distinction between two common if often implicit notions of ‘theory’ in social inquiry.¹³ ‘Theory’ can thus be used in the sense of an *ordering-framework*, which permits observational data to be used for predicting and explaining empirical events. This is clearly the position of Haas et al.,

13. Sayer evokes a third sense of ‘theory’ in which the term is used interchangeably with ‘hypothesis’ or ‘explanation’. This is probably the most intuitive understanding of ‘theory’, but we shall bypass this sense of the term, which particularly in the guise of ‘hypothesis’ has much in common with the understanding of ‘theory’ as an ‘ordering-framework’.

and, one may add, other fields of social research that share the naturalist aspirations of mainstream institutionalism in international relations studies, notably economics. In somewhat simplistic terms, one might say that ‘theory’ as an ordering-framework is the means by which this breed of scholars seek to decontextualise knowledge to reach another key feature of the natural science ideal of theorising: the ability to explain and predict events. But ‘theory’ can also be used in the sense of *conceptualisation*, a particular way to conceive of something. Although far from Sayer’s understanding of what ‘conceptualisation’ should entail, one could say that this is what Kuehls’ many metaphorical insurrections are about: by changing the words (or ‘signifiers’) used to make sense of objects (or ‘referents’), we may take Kuehls to hope that he can also change the way those objects are perceived – if not the objects themselves. My faith in the power of metaphors does not reach quite that far. Yet it is in the sense of theory as conceptualisation that I hope to make an abstract contribution to critical environmental geopolitics.

As already noted, the notion of ‘theory’ as conceptualisation is not only derived from Sayer, it is also the understanding of the term favoured in his articulation of critical realism. The arguments for this position are complex (Sayer 1992 and 2000). For the present purpose, however, it will do to acknowledge two (grossly truncated) arguments for the centrality of conceptualisation. First, critical realism holds that our experience of the world is conceptually mediated, which is to say that we cannot gather neutral data or observe events objectively in the sense of conventional social science. Therefore, critical realists usually emphasise a research strategy in which theoretical concepts inform and are in turn informed by concrete materials – iterative abstraction is the technical term some might apply to this strategy (Yeung 1997). Second, if related but also more profound, the importance of conceptualisation relates to the ‘deep’ ontology of critical realism. Unlike ‘empirical realists’ who strive to find regularities between observable events, recall how Haas et al. stress the need to examine ‘observable political events’, critical realists maintain that events are generated by underlying structures and mechanisms. These structures and mechanisms are ‘real’ in the sense that they exist independent of our knowledge of them, but they are usually unobservable and are therefore to be isolated through careful abstraction and conceptualisation. Yet critical realism is not a determinist philosophy, for although the structures are seen as necessary properties an object, its mechanisms are contingent. This is to say that mechanisms are possible ways in which structures can be realised in particular events, but whether they are realised or not depends on the particular context; therefore, ‘what causes an event has nothing to do with the number of times it has been observed to occur’ (Sayer 1992: 110). Among other things, this implies that we should not look for still more examples of particular events to reach ‘valid generalisations’, but instead carefully study a few or even a single case to the depths of those structures and mechanisms that generates events.

I am more than just sympathetically inclined towards critical realism, which holds the promise of a material ontology that is sensitive to meanings, and we shall

later return to notions drawn from critical realism. Yet, as others have realised before me, the philosophically attractive ambition to reclaim reality in social research is often difficult to accomplish in practice; ‘Potential converts in critical realism often face rather embarrassing difficulties in realizing the power of realist philosophy in their empirical research’ (Yeung 1997: 55). Arguably, this is particularly the case in large-scale analyses, which in the phrase of Tilly (1984) must confront big structures, large process, and huge comparisons. In the terms of critical realism, we could also say that large-scale analyses not only address ‘open systems’, systems we cannot control experimentally, but extremely open systems with an almost unmanageable number of interacting structures and mechanisms. Therefore, we are not only faced by a problem of identifying relevant structures and mechanism, but may also run a real risk of attributing one mechanism (and its structure) effects that are actually due to another; the danger of ‘chaotic conception’ is imminent.

This does not imply that critical realism is incompatible with large-scale analyses, and it is heartening that a few international relations scholars have found way to critical realism, not to bridge but rather to supersede the tedious debates on ‘reflectivism’ versus ‘rationalism’ (Patomäki and Wight 2000). Yet it is beyond the scope of this study to conceptualise possible mechanisms and structures. Rather, the abstract aim is to conceptualise in the more limited sense of providing a system of concepts, which can help us to perceive possibly new objects or aspects of objects. Because concrete events must be analysed in their geohistorical context, a system like that can never be generalised, i.e. treated as a framework for universal explanation and prediction. But a system of concepts developed in one context can be transferred to other contexts as a means to develop our understanding (and in turn conceptualisation) of broadly similar objects. With these methodological signposts in mind, we can now turn to the first part of the concrete analysis of intergovernmental Baltic Sea environmental cooperation.

Chapter Three

An Ailing Sea Between East and West

In the early 1970s, a lawyer with the Swedish ministry of foreign affairs remarked that the absence of regional cooperation and regulation on environmental issues in the Baltic Sea area was ‘conspicuous’ in comparison with the emerging cooperation on similar issues elsewhere (Johnson 1973: 211). Some twenty years later, however, another Swede could paraphrase this remark, this time to point out that environmental cooperation in the Baltic Sea area by the early 1990s had become ‘almost conspicuously present’ (Stålvant 1993: 118). The two decades separating these observations were marked by the unravelling of the cold war geopolitical order, of course. But on a more mundane level, the period was also characterised by a gradual formalisation and expansion of intergovernmental cooperation on the marine environment of the Baltic Sea, cooperation that had struck roots well before the geopolitical landmarks of 1989 and 1991. From its cautious start in the early 1970s, this process of intergovernmental environmental cooperation was intensified during the late 1980s and had by the 1990s come to embrace intergovernmental organisations like the European Union and the European Bank for Reconstruction and Development, several non-governmental organisations and a host of scientific research institutions.

The development of environmental cooperation in the Baltic Sea area can thus be seen as a practical attempt to reconcile the tension between ‘environmental’ and ‘political’ spaces epitomised in the notion of environmental interdependence. This process could surely be analysed in terms of what this ‘reconciliation’ implies for received understandings of sovereignty, or, on the contrary, how it was possible in spite of the steadfastness of such notions of sovereignty. Broadly speaking, this would be the usual line of enquiry from respectively the ‘critical’ and ‘problem-solving’ perspectives discussed in the previous chapter. Following the introductory discussion at the end of that chapter, however, this development can also be analysed as the gradual political structuring of the Baltic Sea as a trans-territorial ‘environmental space’. This is the topic I will address in the rest of this study through a chronicle of the concrete development of environmental cooperation in the Baltic Sea area. Intersected by abstract reflections, this should eventually lead us some way towards an appreciation of the geopolitics of environmental interdependence.

This chapter addresses the period from round about 1970 when the Baltic Sea marine environment first entered intergovernmental politics and the preparation and conclusion of the first convention on the marine environment of the Baltic Sea in 1974. Practices associated with the exercise of sovereignty played no minor part during this period. Yet the period also marked the first steps in the spatialisation of

the Baltic Sea as an ‘environmental space’. The abstract discussion of this development is the topic addressed in the next chapter.

3.1 An Ailing Sea

In 1994, to mark the twentieth anniversary of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, the Helsinki Convention, the Helsinki Commission published a glossy pamphlet that offered the reader a précis of the history leading to the conclusion of the 1974 convention:

At the end of the 1960’s deep concern was expressed for the increasing pollution of the Baltic Sea, especially by scientists. In July 1971 the Government of Finland declared its willingness to convene an intergovernmental meeting to consider how a joint convention to protect the Baltic Sea could be prepared.

At the First UN Conference on the Protection of the Human Environment, held in Stockholm, in 1972, the Delegation of Finland restated Finland’s willingness to convene a conference concerning the protection of the Baltic Sea. After the UN conference a request was circulated and positive answers were received from all the riparian states of the Baltic Sea.

Thus, in 1973, the first intergovernmental expert meetings were called to consider the possible structure and subjects of a convention and the measures that would be needed to implement and administer such a convention.

The Convention on the Protection of the Marine Environment of the Baltic Sea Area was signed by all the seven Baltic Sea States at the end of the Diplomatic Conference on the Protection of the Marine Environment in the Baltic Sea Area, in Helsinki, Finland on 22 March 1974. (Helsinki Commission 1994a: 6; also Helsinki Commission 1994b: 8)

The Helsinki Commission – formally the Baltic Marine Environment Protection Commission – is the intergovernmental body set up to administer the Helsinki Convention, and its historical account is factually correct. Being an intergovernmental organisation, however, it should not come as a surprise that the Helsinki Commission in its sketchy history omitted much that could disturb the image of a harmonious convergence of governments to tackle pressing environmental problems. This is not to say that environmental cooperation in the Baltic Sea area has been particularly prone by hidden conflicts; if anything, this venture has been suspiciously amicable. This been said, however, I will in the following take a step to fill in some blanks in the history outlined by the Helsinki Commission.

Located between the Fenno-Scandian peninsular and the European continent, the Baltic Sea, like the Mediterranean and the Black Sea, is a semi-enclosed sea, which is to say that it is separated from the North Sea and the oceans beyond by the narrow and shallow sills of the Sound and Belt Sea – the Danish Straits (Figure 3.1). With a maximum sill depth of less than 20 metres and a very narrow cross section, these inlets give the Baltic Sea a fjord-like character. This barrier is by some seen as the natural limit of the Baltic Sea. This is, for example, the delineation used in the entry on the Baltic Sea in the Danish Encyclopaedia (2001). More often, however, the Baltic Sea

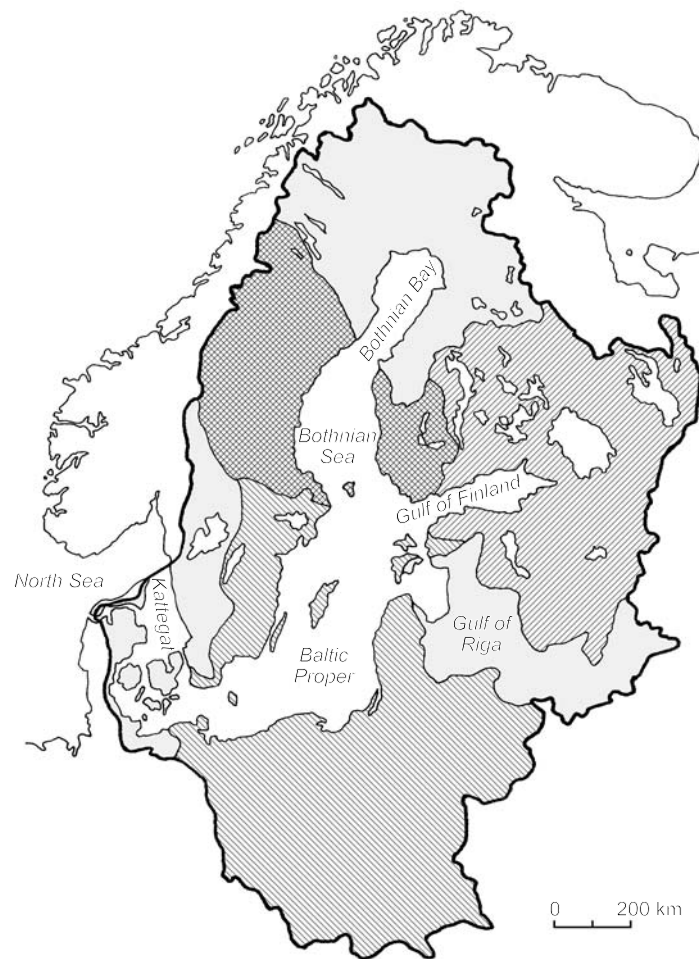


Figure 3.1 Major sub-basins of the Baltic Sea (the Danish Straits are shown as the southern part of the Kattegat basin).

is considered to include the transition zone of the Danish Straits and the Kattegat. An early study of the environmental conditions of the Baltic Sea thus concluded the definition of its study area with the statement that ‘Due to the importance of conditions in the Öresund [the Sound], the Danish Belt Sea and the Kattegat to the Baltic Sea, it was agreed also to consider these areas’ (ICES 1970: 4). This is also the definition used in the Helsinki Convention, although, as we shall see, it had not necessarily to be so. In this larger delimitation, the Baltic Sea has a surface area of 0.42 million square kilometres (a little less than the size of Sweden) and a topographical catchment area (or drainage basin) of about 1.7 million square kilometres. Besides the Kattegat, marked by the barrier of the Danish Straits, the Baltic Sea is topographically divided into five relatively distinct sub-basins, which again can be divided into an almost infinite number of smaller basins. Accounting for 51 per cent of the total surface area and 60 per cent of the total volume, the Baltic Proper is not only the largest of these major sub-basins; it is also the part of the Baltic Sea with the greatest depths, the

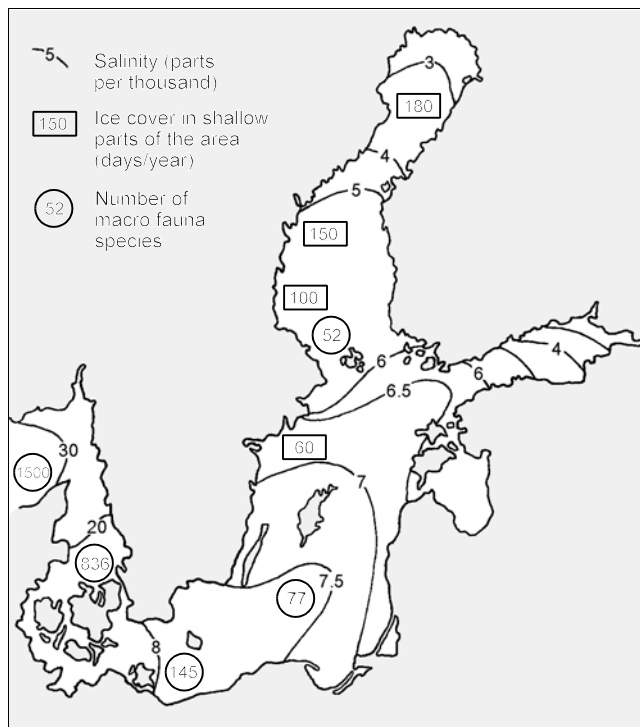


Figure 3.2 Distribution of salinity, days of ice cover and macrofauna species within the Baltic Sea.
Source: Kautsky & Kautsky (2000)

deepest point being the 459 metres of the Lansort Deep. Yet with an average depth of some 60 metres, the Baltic Sea is generally a fairly shallow sea.

Each of the major basins is characterised by distinct oceanographic and environmental particularities. Yet it is mainly the narrow outlet to the oceans that accounts for the distinct character of the Baltic Sea, or, more exactly, the Baltic Sea east of the Danish Straits. Some two hundred rivers discharge into the Baltic Sea, and as the climate is humid and cold-temperate, so does land runoff and precipitation easily compensate the loss to evaporation. This gives the Baltic Sea a positive annual water balance close to 500 cubic kilometres. Owing to this excess of fresh water, the out-flow is about twice the amount of the inflow of more saline and oxygen-rich water from the North Sea. This makes the Baltic Sea the largest body of brackish water in the world. Within this basin, the salinity decreases rapidly with the distance from the outlet of the Danish Straits (Figure 3.2). Salinity is the most important factor affecting marine life, and the decrease in salinity is therefore followed by a dramatic decline in the number of species as one move into the Baltic Sea. This makes the Baltic Sea a very species-poor environment, where marine and freshwater species often live on a threshold of the possible. Moreover, due to differences in temperature and the number of days with ice cover, the salinity gradient is paralleled by marked differences in the productive season. The productive season is thus as short as 4-5 months in the Bothnian Bay to the north, while the season in the warmer south last for 8-9 months.

Besides the horizontal salinity gradient, the central parts of the Baltic Proper are also stratified vertically by a sharp and permanent discontinuity between a brackish upper level and a more saline lower level (Figure 3.3). This 'halocline' occurs at a

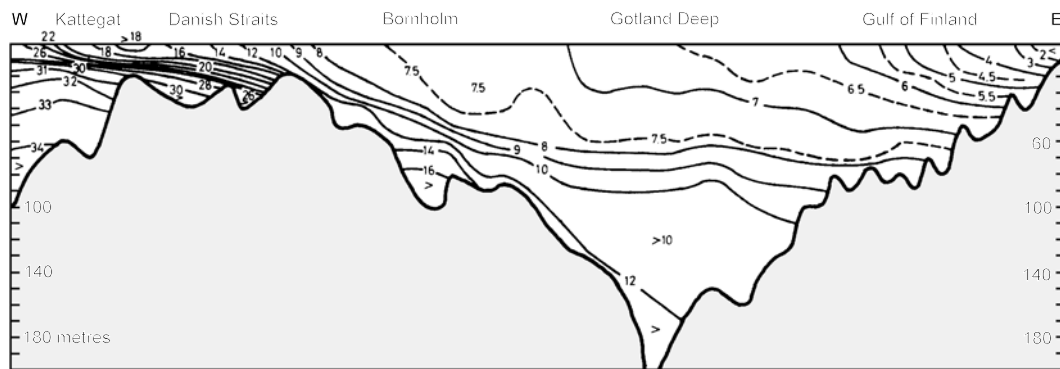


Figure 3.3 Cross section of the vertical stratification of salinity in the Baltic Sea (salinity in parts per thousand). Source: ICES (1974).

depth of about 60–80 metres. Less marked haloclines often appear above and below this permanent halocline, and the surface water of the Baltic Sea is also in the summer season vertically stratified by sharp discontinuities in the temperature (thermoclines). This multi-layered structure prevents the vertical circulation between the upper and lower level in the water column, which results in an accumulation of degradation products from natural and human-induced organic material and, with significant annual variations, in a depletion of the oxygen content in the deep and coastal waters. These tendencies to oxygen reduction are further aggravated by the low influx of oxygen-rich water from the North Sea and the almost nonexistent tidal circulation within the Baltic Sea. Also, because of the narrow outlets, it is estimated that a complete renewal of the water in the Baltic Sea takes as much as 20–35 years. Harmful substances such as chemicals and other pollutants may therefore remain within the sea for a long time. (The quantitative estimates in the above description are derived from Kautsky and Kautsky (2000) and Falandysz et al. (2000).)

There is certainly much more to the hydrographic and environmental character of the Baltic Sea than suggested in these introductory points. It remains, however, that the Baltic Sea is a very species-poor environment, which increases the risk that whole functional groups can be lost to the system. Moreover, this flora and fauna is already without human interference living under severe physiological stress caused by factors such as low salinity, temperature and short growing seasons. Altogether, this makes the Baltic Sea particularly sensitive to pollution.

The Baltic Sea is today a well-studied marine environment. But the lack of sufficient environmental knowledge was a frequent point of complaint during the early negotiations for a convention on the protection of the Baltic Sea marine environment. So to get an impression of the environmental concerns that prompted these negotiations, it seems appropriate to take a brief look at one of the region-wide assessments available at the time: the 1970 report on pollution of the Baltic Sea prepared by a working group of the intergovernmental International Council for the Exploration of the Sea (ICES), which in the words of one observer provided the ‘most important international scientific activity in the early 1970s’ (Lundqvist 1976: 48).

As this study is about the spatiality of environmental politics rather than the environment as such, we may in passing note that much of the ICES report was a state-by-state inventory rather than a truly 'regional' analysis. This contrast with the far more trans-territorial approach that has characterised the environmental assessments of the Baltic Sea over the past decade or so, and can, to a point, be seen as an indication of the extent to which the Baltic Sea has been institutionalised as an 'environmental region' since the early 1970s. But that is to jump ahead in the history.

As already mentioned, the report of the ICES working group was for a large part a compendium of environmental statistics and assessments for the individual Baltic Sea states. This was an important step, of course. But the report also contained sections that sought to synthesise the available knowledge, which in several instances clearly caused concern among the experts. The first of these concerns related to the oceanographic features of the Baltic Sea introduced above, namely the tendency to a decrease in the oxygen content below the permanent halocline. Here, in the deep waters of the Baltic Sea, the working group noted that the oxygen content had decreased during the recent decades. Moreover, as a clear indication that the oxygen content had reached zero, measurements for the winter 1968-69 showed that hydrogen sulphide for the first time had appeared in the Landsort Deep. 'If this development continues in the Baltic deep water,' the working group noted gravely, 'the whole of the water mass below the halocline will probably turn into a lifeless "oceanic desert" such as is found in the Black Sea' (ICES 1970: 14). The working group conceded that it could not determine the precise reason for this development since knowledge on the fundamental processes regulating the oxygen supply was limited. The oxygen reduction could relate to changes in the hydrological particularities of the Baltic Sea, for example, but the oxygen reduction could also relate to human pollution, either directly by sewage and waste or indirectly from the runoff of plant nutrients.

Not altogether unrelated to their first concern, the question of sewage and industrial pollution was the second main issue addressed by the working group. Concerning sewage pollution, the group noted marked differences in the quantities carried out into the different sub-basins. Most affected were the heavily populated areas of the Bay of Finland and the Sound, while the sewage pollution to the Bothnian Sea and Bay was relative small. Yet the working group noted that most sewage was discharged directly into the Baltic Sea without any treatment, although some countries had constructed or planned to construct pipelines to protect the near-shore areas. This, the group agreed, was generally not a good way to dispose either sewage or industrial wastes since 'the heavy load of nutrients carried out by pipelines can eventually influence the conditions of such a closed area as the one dealt with in this report' (ICES 1970: 22). Echoing their worry about oxygen depletion in the deep waters, the group noted that heavy organic loads could cause oxygen reduction in the water followed by changes in the marine flora and fauna, and registered that such changes had already been reported in some fjords and bays. The working group also

noted noticeable regional differences in respect to the impact of industrial pollution. All coastal waters were contaminated by industrial wastes, but due the large paper and pulp industries in particular, the problem seemed worst along the coasts of Sweden and Finland. Once again, the organic matter from these industries could decrease the oxygen content of the water.

Oxygen reduction was clearly a main concern of the ICES report and it was probably for this reason it included a separate section on the general discharges of organic matter and phosphorus, a key plant nutrient. Although not described as such, the working group thus outlined what is commonly known as eutrophication; that is, the process where an excessive concentration of organic matter and plant nutrients increases the production of algae and microscopic organisms in the surface waters, which prevents the penetration of light and causes oxygen depletion near the bottom during decomposition. Again, the working group emphasised the need for further research, but concluded, nonetheless, that organic waste and phosphorus values had negatively affected several coastal areas and in some cases also influenced stretches beyond the coastal zones. Eutrophication is today considered one of the main environmental problems of the Baltic Sea (see, for example, Helsinki Commission 2001a; Falandysz et al. 2000.)

Although a recurring topic in the report, the various sources of oxygen reduction in the coastal and deep waters were not the only potential environmental problem addressed in the ICES report, which also included individual sections on warm water pollution from power plants, radioactive pollution, pollution from ships other than oil as well as more exotic issues such as underwater prospecting, sand-sucking and the collection stone and gravel. These issues were only accorded very brief attention and did not raise any alarm in the report. But the working group also devoted some attention to other issues. It noted, for example, that toxic substances such as heavy metals, cyan compounds, phenol and in particular PCBs could become a problem. At the time the group considered such discharges to be very small. Elsewhere in its report, however, the working group devoted a separate section to the question of pesticides, mercury and the insecticide DDT. In this respect, the report noted that concentrations of DDT in the Baltic Sea were several times higher than off the Swedish west coast, and that DDT concentrations in seals from the Baltic Sea seemed to be up to ten times as high as those reported from North Sea seals. If only in an aside, the working groups also discussed the transfer of industrial pollutants from the air to the marine environment. Different sulphur components appeared to make up most of the air pollution but were not expected to influence the marine environment to any great extent. The working group noted, however, that considerable amounts of heavy metals and other toxic components were carried by air from the industrial centres in Europe and could be deposited in the Baltic Sea. Part of the PCB found in offshore organisms was for example believed to be deposited from the atmosphere. Also, the ICES working group addressed the question of oil pollution, which, as we shall see shortly, was a major concern at the time. In this respect, the report con-

Table 3.1 Multilateral agreements with significant sections on the environment, 1950–1989.

	1950s	1960s	1970s	1980s	Total
Marine	4	4	14	8	30
Atmosphere	0	0	1	4	5
Wildlife/habitat	1	1	3	2	7
Nuclear	0	4	1	2	7
Antarctic	1	0	1	2	4
General framework	0	0	3	2	5
Other (e.g. space/waste)	0	2	3	1	6
<i>Total</i>	<i>6</i>	<i>11</i>	<i>26</i>	<i>21</i>	<i>64</i>

Source: Brenton (1994)

cluded that oil pollution from ships was ‘a permanent but minor problem’ (ICES 1970: 41). The group noted, however, that installations for collecting oil waste were too few and often too expensive, and it agreed that a few major disasters with oil tankers in the sensitive environment of the Baltic Sea could ‘annihilate the marine life and fisheries’ (ICES 1970: 44).

3.2 Between East and West

The first moves towards some sort of official cooperation on the environmental problems of the Baltic Sea took place in the end of the 1960s when representatives of the then seven Baltic Sea states in 1969 and 1970 met in Visby on the Swedish island of Gotland. On the latter of these conferences, the delegates drew up a draft agreement, where the parties in the preamble solemnly recognised

that the pollution of the Baltic Sea and Kattegat area is a reality as a result of the discharging of impurified and insufficiently purified industrial and household sewage as well as contamination caused by navigation or other forms of activity of the population of the Baltic Sea states, [and acknowledged] that it is necessary to take without delay complex measures for discontinuing any further pollution of the Baltic Sea and Kattegat area and improve its quality.¹

For all the promises of a comprehensive approach to the pollution of the Baltic Sea contained in this opening, the 1970 Visby draft agreement was a rather limited affair that only addressed the narrow problem of oil-pollution from vessels at sea. And even within this restricted focus, the agreement mainly dealt with the exchange of information and assistance in case of oil-pollution at sea. It did recognise, however, that this ‘constitutes only a beginning on the way to make and keep the area a clean sea’.

1. ‘Draft Agreement for Co-operation in Dealing with Pollution of the Baltic Sea and Kattegat Area by Oil’, Annex II to the Protocol of the Visby Conference on the Prevention of and Dealing with Pollution of the Baltic Sea and Kattegat Area, Visby, 28 August 1970. Here quoted from a reprint in the documents to the Meeting of Government Experts for the Preparation of the Baltic Sea Conference on the Marine Environment, Helsinki, 28 May – 2 June 1973, BSC/PREP/INF4 of 28 May 1973.

Considering that the Visby draft agreement itself recognised that oil from vessels at sea only made up one aspect of the pollution of the marine environment of the Baltic Sea, one might rightly ask why the conference confined its deliberations to this minor problem. Yet this limited focus was in no way particular to the Baltic Sea area, but was a general characteristic of the early efforts to establish intergovernmental environmental cooperation. In his study of the development of intergovernmental environmental cooperation, Brenton thus remarks that it ‘was in many ways in the field of marine pollution that the international environmental negotiating community learned its craft’ (Brenton 1994: 91). It is a delicate task to distinguish what is environmentally related and what is not, but this view is supported if one takes stock of the issues addressed in the multilateral environmental agreements concluded from 1950 to 1989 (Table 3.1). Agreements on the marine environment were in this period second to none as for the number of agreements concluded. And within this already limited field, the focus was for long on ship-based pollution, in particular oil spills from tankers.

Most directly, this focus on ship-based pollution can be explained by the rapid increase in the quantities of oil being transported by sea during the 1960s and 70s, which resulted in a string of serious and highly profiled incidences of oil pollution (M’Gonigle and Zacher 1979). The wrecking in 1967 of the supertanker *Torrey Canyon* in the English Channel was in this respect a key event, which, among other things, motivated the 1969 Bonn Convention to limit oil pollution in the North Sea. The Visby Conference can – to some extent, at least – be seen as an attempt to extend similar regulation to the neighbouring Baltic Sea. But this focus on ships fed into a long tradition for rules and regulations on navigation (Steinberg 2001); after all, it is not least for his *Mare Liberum* (1608) that Hugo Grotius is remembered as the ‘father’ of international law. (Incidentally, Grotius died of exhaustion after having been shipwrecked in the Baltic Sea.) This points towards a more subtle reason for the focus on ship-based pollution, which relates to the fact that such pollution often occurs in the not ‘sovereignised’ global commons, to which the high seas conventionally are grouped as an archetypical example (Section 1.3). For in comparison with the other ideal-typical domains of environmental interdependence – transboundary environmental problems and, in particular, internal environmental degradation – it is in the global commons that states have accepted the greatest limitations on their abilities to do as they please. This, Litfin (1997) suggests, is probably precisely because the global commons fall outside the sovereign jurisdiction of any state, and she finds support for this argument in M’Gonigle and Zacher’s study of the development of the International Convention for the Prevention of Pollution from Ships (MARPOL), which with particular relevance for the present study argues:

as a readily identifiable source largely beyond the prickly barriers of national sovereignty, ship-generated oil pollution is one of the easier of these many threats to control. It was for this very reason that vessel-source pollution was singled out for detailed treatment by the Law of the Sea Conference, while other, more serious land-based sources were made subject to only the vaguest of obligations. (M’Gonigle and Zacher 1979: 345)

This imbalanced attention to land and ship based sources of marine pollution could read as a description of the 1974 convention on the marine environment of the Baltic Sea, and we shall return to the ‘prickly’ question of sovereignty later in this chapter. For the moment, however, we shall return to the Visby Conference, if only to acknowledge that the protocol of the meeting ended with an urgent call for action on the limited question of oil-pollution from ships as a step towards more ambitious undertakings:

The delegations have agreed that in view of the increasing pollution of the Baltic Sea and Kattegat area it is necessary to early sign a corresponding Agreement and take urgent measures to fight oil-pollution within the area as a first step on the way to make and keep the area a clean sea.²

Still, the Visby agreement remained a draft, and already the list of participants to the 1970 Visby Conference provides a clue to the reason. For the ‘western’ governments, which in this respect included Finland and Sweden, had all sent a single or very few delegates representing specialist departments on the lower rungs of the governmental hierarchy. The ‘eastern’ states, on the other had, turned up with comparatively sizable delegations who were simply identified as representing their respective states. Petty as it may seem, this was an indication that the Visby Conference had been caught up in cold war politics, or, to be more precise, was about to fall victim to the ‘German question’.

The Soviet Union had in 1954 formally recognised the sovereignty of the German Democratic Republic (GDR). But this move was not reciprocated by the ‘western’ states, including the United Nations and most neutral states, who chose to recognise the claim by the Federal Republic of Germany (FRG) to be the sole representative of the divided Germany – the *Alleinvertretungsanspruch*. In fact, it became impossible to maintain diplomatic relations with both German states as the so-called Hallstein-doctrine in 1955 made it mandatory for the FRG to sever its diplomatic relations with any state that recognised GDR, a problem Finland because of its particular relationship with the Soviet Union solved by withholding its formal recognition of the GDR as well as the FRG (while simultaneously maintaining substantial informal relations with both). Yet it was for practical reasons impossible for the ‘West’ simply to ignore the existence of the GDR, and neighbouring countries like Denmark and Sweden therefore developed a practice where relations were maintained through formally non-state actors or state agencies on a sufficiently low level not to imply diplomatic recognition. The GDR was for its part eager to engage in any relation that could edge it towards recognised statehood. An active venture was in

2. ‘Protocol of the Visby Conference on the Prevention of and Dealing with Pollution of the Baltic Sea and Kattegat Area’, Visby, 28 August 1970. Here quoted from a reprint in the documents to the Meeting of Government Experts for the Preparation of the Baltic Sea Conference on the Marine Environment, Helsinki, 28 May – 2 June 1973, BSC/PREP/INF4 of 28 May 1973.

this respect the annual Baltic Sea Week, which the GDR from 1958 to 1975 convened to celebrate the Baltic Sea as a 'sea of peace' (Keylor 1992; Friis 2001).

In this perspective, the GDR – and the Soviet Union – may well have seen the Visby Conference as yet another avenue towards 'western' recognition. In fact, with Baltic Sea environmental cooperation as a case-study, Darst (2001) argues that the Soviet Union in the late 1960s began a general policy of 'instrumental manipulation' in its international environmental policy. This does not imply that the Soviet leaders, let alone their scientists, were unwilling to address environmental problems. But in Darst's analysis, the main incentive for this engagement in East-West environmental cooperation was a Soviet wish to project an image of 'cooperativeness', which could moderate 'western' hostility and enhance the prospect of cooperation on non-environmental issues. A policy of 'instrumental manipulation' was undoubtedly one reason for the Soviet willingness to engage in Baltic Sea environmental cooperation, and we will briefly return to the issue under the broader and more neutral banner of 'functionalism' (Section 3.4).

Efforts to resolve the 'German question' were underway. In the same year as the unsuccessful 1970 Visby Conference, the FRG had thus as part of Chancellor Willy Brandt's *Ostpolitik* opened direct negotiations with the GDR to normalise relations between the two German states. But the results of this inter-German *rapprochement* were still some years off, and the diplomatic schism of the unresolved 'German question' had direct implications for the Visby Conference. This was something the protocol of the meeting did not try to hide:

As it was stated already at the conference 1969 the delegations of the German Democratic Republic, the Polish People's Republic and the Union of the Soviet Socialist Republics considered that co-operation in dealing with oil-pollution in the Baltic Sea and Kattegat area can be made effectively only by means of concluding an Agreement among the governments, while the delegations of Sjöfartsverket [Sweden], Olieföretningsrådet [Denmark], Wasser- und Schifffahrtsdirektion in Kiel [FRG] and Sjöfartsstyrelsen [Finland] felt an Agreement among the authorities directly concerned should be sufficient for the time being.

This conflict between an 'eastern' wish to engage in formal governmental relations and a 'western' preference to keep relations on a formally informal level had the curious implication that the Visby draft agreement over several pages was divided into two columns: one with the text phrased as a low-key agreement between 'competent authorities', the other with the text drawn up with all the formalities of an intergovernmental convention. A diplomatic curiosity, indeed, yet it remains that even at a time celebrated for *détente*, the cold war and especially the unresolved 'German question' was the main obstacle to the cautious attempts to establish some measure of intergovernmental cooperation on the marine environment of the Baltic Sea in the early 1970s: an 'iron curtain' had not merely descended on Europe 'From Stettin in the Baltic to Trieste in the Adriatic,' as Churchill rumbled in 1946; it also extended beyond Stettin and muddied the waters of the Baltic Sea.

3.3 Negotiating Space

The spectre of cold war politics continued to stalk the early attempts to establish some sort of cooperation on the Baltic Sea environment after the abortive Visby Conference. But concerns for the state of the Baltic Sea did not diminish, and the question was for example in 1971 discussed at a meeting of the Nordic ministers of foreign affairs. Following that meeting, the Finnish government expressed its willingness to arrange a conference on the marine environment of the Baltic Sea. This was to no avail, but the Finnish government nonetheless repeated its call at the 1972 United Nations Conference on the Human Environment (UNCHE) in Stockholm. The irony was, of course, that the Soviet Union and its client states did not to participate in the Stockholm Conference because of the Western reluctance to recognise the GDR.

In the same period, however, the inter-German negotiations reached a critical stage, which in December 1972 culminated in the signing of the Basic Treaty between the two German states. The Basic Treaty did not accord the GDR the formal diplomatic recognition it had always demanded as a precondition for inter-German reconciliation. But the treaty did open for increased relations and the exchange of permanent missions between the GDR and the FRG, and both were in September 1973 admitted into the United Nations as separate sovereign entities (Keylor 1992).

Anticipating this development, the Finnish government restated its willingness to arrange an intergovernmental conference on the environment of the Baltic Sea: 'As the delicate German political situation has reached the current phase and especially as the GDR, Poland and the Soviet Union did not participate in the Stockholm environment conference,' a formal note to the Danish government pondered, 'Finland's government considers that the time has come to take concrete steps on a governmental level for the protection of the Baltic Sea.'³ The Finnish government therefore saw fit to enquire whether Denmark and the other Baltic Sea governments were interested in concluding a convention on the protection of the environment of the Baltic Sea, and whether the governments would participate in a conference on the question.

As a final indication of just how obstructive the 'German question' had been in the early attempts to establish some form of environmental cooperation in the Baltic Sea area, we may in passing take note of the covering letter, which the Danish ministry of foreign affairs attached to the Finnish invitation when it was circulated to the relevant Danish ministries. Here, with flawless diplomatic ambiguity, the ministry noted:

3. Embassy of Finland to the Danish Ministry of Foreign Affairs, note of 31 October 1972 (Archives of the Danish EPA). My translation. In this and the following translations I have sought to follow the original wording as closely as possible, even if this sometimes involves the reproduction of rather archaic sentences. The original quotations are reproduced in the appendix, which also gives the full sentence in those cases where only a part is quoted in the text.

In keeping with the current practice concerning Denmark's relationship to the GDR, the ministry of foreign affairs is not of the opinion that a governmental conference can take place with Danish participation before Denmark officially has recognised East Germany. As suggested from the Finnish side, however, the possibilities for a normalisation in the relationship with the GDR appear foreseeable. The ministry of foreign affairs is therefore in principle in favour of the carrying through of a conference as it has been suggested from the Finnish side.⁴

Positive replies to the Finnish request began to trickle in during the following months and occasioned a string of formal and informal deliberations and meetings that eventually led to the first convention on the marine environment of the Baltic Sea. The official documents of intergovernmental negotiation are usually highly polished. So before turning to formal preparations of the 1974 convention, we can pause with an informal note by Ambassador Gunnar Seidenfaden to the Danish ministry of foreign affairs, where he commented on the Finnish invitation and with unusually frankness anticipated the substance of what was to follow.

Seidenfaden, a scientist-turned-diplomat who had been involved in previous environmental ventures in the Baltic and elsewhere, began his note by addressing the questions of oil-pollution and the dumping of refuse from vessels at sea. Both questions had been suggested by the ministry as possible issues for cooperation and Seidenfaden found that reaching a result on these issues should be reasonably easy; the Visby draft agreement and the just concluded Oslo Convention on dumping in the North Sea and the Northeast Atlantic could in this respect serve as a basis. But, he added: 'One must simply be aware that this is highly marginal in relation to the main questions on the pollution of the Baltic Sea and a positive result on this field more is suitable to lead people by the nose than a substantial step in the direction of improving the conditions'.⁵ This was because the ship-based issues in Seidenfaden's analysis were 'completely subsidiary in the question of the pollution of the Baltic Sea when compared with the problems concerning pollution from land'. Yet, he added ruefully, land-based pollution was:

a field where international agreements on abatement for several years cannot be expected to amount to anything but handsome promissory clauses and declarations of intent. From the Danish side we are probably just as unwilling as the other Baltic Sea states to accept any international commitment before we are much further in the resolution of our national sewer and waste water problems.

Seidenfaden went on the head the Danish delegation to most of the meetings convened to discuss the Finnish proposal. Before the first of the official meetings, however, there was an informal meeting between representatives from Denmark,

4. Danish Ministry of Foreign Affairs to the Danish Ministry of the Environment, letter of 8 November 1972 (Archives of the Danish EPA). My translation.

5. Seidenfaden to the Danish Ministry of Foreign Affairs, note of 24 November 1972 (Archives of the Danish EPA). My translation.

Finland and Sweden. This meeting discussed several questions, but we shall merely take note of a small and yet political-geographic suggestive issue addressed by the meeting. We have previously seen how the Baltic Sea and the Kattegat were mentioned as separate waters in the 1970 Visby draft agreement. At the informal Nordic gathering, however, it was briefly discussed whether the Kattegat between Denmark and Sweden should be included as part of the Baltic Sea. In the telegraphic style of the protocol:

It was discussed what the concept Baltic Sea includes. The Kattegat does not belong to the Baltic Sea from a geographical point of view. In addition it was established that the Kattegat could be included in the coming regulation for the Baltic Sea if the Danish and Swedish side wish so.⁶

Denmark and Sweden must have wished to include the Kattegat, for the Kattegat was apparently without further debate included as part of the Baltic Sea in the ensuing negotiations and the 1974 convention. The only argument for this inclusion I have found is a short and somewhat obscure remark in a Danish memorandum, which deemed it ‘desirable that the Kattegat is included in the rules that might be adopted on the Baltic Sea, since one may fear a particular strain of waste in those waters that are directly connected to the waters of the agreement’.⁷

We have previously briefly noted that the image of the catchment area frequently is evoked to represent the condition of environmental interdependence the Baltic Sea area (Section 1.3; Figure 1.4). This mode of representation includes the Kattegat, but we can now establish that the western most boundaries of the Baltic Sea catchment area presented in this image just as well could have been pitched up to two-hundred kilometres further to the east (cf. Figure 3.1). The inclusion of the Kattegat in the Baltic Sea area was in other words a *political* decision, although a political decision which at least in the Danish case was made with some reference to environmental considerations. It does not quite make sense, therefore, when a study without further specification states that the ‘Baltic region is defined by the drainage basin of the Baltic Sea’ (Vesa 1989: 36). This question of ‘scaling’ is something to which we shall return later in this and the next chapter.

The first formal meeting to discuss the Finnish proposal for a conference to set up a convention to protect the marine environment of the Baltic Sea was convened in Helsinki in the early summer of 1973. Before this meeting, the Finnish government prepared an Explanatory Memorandum to explain the reasons for its proposal to convene a conference, in which the general introduction was concluded with the following statement:

6. ‘Möte i Helsingfors torsdagen den 25.1.1973 rörande samkallandet av en Östersjökonferens om det marina miljön’, Ministry for Foreign Affairs, Helsinki, protocol of 8 March 1973 (Archives of the Danish EPA). My translation.

7. Draft comments on the Finnish memorandum, Danish Environmental Protection Agency to the Danish Ministry of Foreign Affairs, 17 May 1973 (Archives of the Danish EPA). My translation.

The Baltic Sea already belongs to the heaviest loaded sea areas of equal size, whereas the ecological balance of the Baltic Sea is extremely sensitive to disturbances. Hence, in the view of the Government of Finland significant and urgent actions need to be taken for the control and prevention of marine pollution in the Baltic Sea. It is with this aim in mind the Government of Finland submitted its proposal to convene a Baltic Sea Conference on the Marine Environment.⁸

On this suitably urgent note the memorandum went on to outline what the Finnish government considered should be the aim of such a conference. In contrast to the narrow focus on oil pollution from ships in the Visby draft agreement, the Finnish government found that the conference should 'take an overall approach to the problem and deal with the pollution to the Baltic Sea in all its aspects'. This should include questions such as 'general guidelines for land-based pollution' and the 'prevention and control of pollution from ships'. Also, the conference should deal with questions of scientific cooperation and joint monitoring, rules and procedures for dealing with compensation for damages and settlement of disputes as well as the establishment of institutional procedures for the implementation of a convention. The memorandum recognised that it was unlikely that the regulation of all these problems could be solved and agreed upon simultaneously. Yet, echoing the modest realism of Seidenfaden, it found that the conference could probably agree on some problems, 'such as for instance the prohibition of dumping of harmful wastes into the sea or co-ordination for the prevention of pollution at sea, where a considerable amount of work has been done already'.

Following this general introduction, the memorandum consisted of an inventory of the environmental issues on which the Finnish government found reason to discuss intergovernmental measures. The details of this inventory reflected many of the same concerns of those raised in the report by the ICES working group (Section 3.1) and need not detain us. Yet to get an impression of possible agenda of environmental issues that could be addressed, we may recount the headlines. In the order they were raised, the Explanatory Memorandum thus addressed environmental issues as diverse as: land-based pollution, which in the words of the memorandum 'includes all local surface effects inside a State as well as the effects of pollution transported by rivers into the Baltic Sea'; airborne pollution to the sea; cooperation in the event of oil and noxious pollution from ships; prevention of pollution from ships; environmental impacts of leisure time activities and tourism; prohibition of dumping; prevention of pollution from activities on the continental shelf; scientific and technical cooperation; responsibility and compensation for damage; settlement of disputes; institutional measures to observe the implementation of a convention; and, finally, the question

8. 'Explanatory Memorandum', Ministry for Foreign Affairs, Helsinki, 12 February 1973 (Archives of the Danish EPA). A reprint of the memorandum was circulated in the documents to the Meeting of Government Experts for the Preparation of the Baltic Sea Conference on the Marine Environment, Helsinki, 28 May – 2 June 1973, BSC/PREP/INF1.

of fisheries, which the Finnish government found should be treated in separation from a convention on the marine environment.⁹

Some of these issues were only accorded very cursory attention in the Explanatory Memorandum. Yet it was potentially a daunting task that faced the ‘government experts’ – a blend of diplomats and environmental scientists – that met in Helsinki in early summer of 1973 to prepare a Baltic Sea conference on the marine environment. Fortunately for the narrator, if not for the marine environment of the Baltic Sea, the deliberations that led to the 1974 convention on the marine environment of the Baltic Sea proved more limited in scope. Still, we should take note of the ambition for what the Finnish memorandum termed an ‘overall’ approach. This ambition points towards the environmental world-view that guided the intended cooperative venture. For although the term ‘ecosystem’ only occasionally appeared in the early discussions, it was essentially the world-view of intense interrelatedness and interdependence we in Section 1.2 have associated with the term that simmered in the emerging intergovernmental Baltic Sea environmental cooperation. Indeed, in Haas’ somewhat condescending analysis,

Officials in the newly created [Finnish] Environment Ministry hoped to use a treaty as an expedient way to create a diplomatic opening to the USSR and East Germany, as well as to convert their holistic ecological views into practice. Many of the officials lacked clear training or understanding of Baltic conditions but were infused with the holistic visions that permeated the climate of the UNCHE preparations’ (Haas 1993: 148).¹⁰

Before turning to the 1974 convention itself, we shall in this section look a little closer at this the first of the four formal meetings that led to the signing of the first convention on the Baltic Sea environment. The subsequent preparatory meetings mainly dealt with technical and legal aspect of the draft convention, which the Finnish government eventually was invited to prepare. From the point of view of the present study, however, the first preparatory meeting is of particular interest since we here encounter several moments in the process of identifying the Baltic Sea as an ‘environmental space’. Also, because of the 112 pages long verbatim report of the formal sessions, this meeting is unique in respect to the available source material.

9. In parallel with the efforts to establish intergovernmental cooperation on the marine environment of the Baltic Sea, a diplomatic conference on the living resources of the Baltic Sea was on the initiative of the government of Poland convened in September 1973. The conference resulted in the Convention on Fishing and Conservation of the Living Resources in the Baltic Sea and the Belts – the so-called Gdansk Convention (Rytövuori 1980). A separation between cooperation on the living resources and the marine environment of the Baltic Sea was thus well underway when the Finnish government wrote its Explanatory Memorandum. This separation has lasted to the present.

10. While Haas’ point may be correct, his reference to a newly created Finnish ministry for the environment is surely wrong. A separate Finnish ministry for the environment was first established in 1983. Haas is probably referring to the National Board of Waters (est. 1970) or the Environmental Protection Department and the Environmental Protection Council within the ministry of the interior (est. 1973). (On institutions in Finnish environmental policy, see Joas 1997.)

The first meeting of government experts took place in context of superpower *détente* and political settlement in Europe. In fact, as the experts met in Helsinki to discuss the marine environment of the Baltic Sea, preparations were well under way for another Helsinki meeting: the meeting of North American and European foreign ministers in July 1973, which eventually in 1975 led to the Helsinki Accords at the first Conference on Security and Cooperation in Europe (CSCE). The Soviet Union had from the 1950s sought such a European security conference, a wish the NATO states in principle accepted in 1966, although preparatory talks first began in 1972. The principal interest of the Soviet Union was to gain implicit recognition of its postwar hegemony over eastern Europe through guarantees of the existing borders (including the German separation) and noninterference in internal affairs. In return for eventually accepting this, the NATO states pressed the Soviet Union for various commitments, in particular the so-called ‘basket three’ provisions on human rights and political freedoms (Keylor 1992).

Considering the Soviet interest in the CSCE, it is hardly surprising that the head of the Soviet delegation to the expert meeting found reason to mention the approaching Helsinki CSCE meeting and stress that cooperation on the marine environment of the Baltic Sea ‘would not only be of tremendous practical importance and benefit to mankind for the preservation of the Baltic, but is of tremendous political significance’.¹¹ This was part of the Soviet general statement at the opening session, but also at the closing session of the expert meeting did the Soviet head of delegation raise the issue when he, almost as his parting words, declared:

This spirit of co-operation which prevailed here during our meeting, in my opinion is a direct consequence of those important measures which are being taken at the present time in Helsinki in Dipoli [conference centre], the aim of which is an improvement in the co-operation amongst all the peoples of Europe.

The wider political context of the negotiations for a convention on the marine environment of the Baltic Sea is something to which we will return later in this and the subsequent chapters. For the moment, however, we shall turn to matters closer to the geopolitics of environmental interdependence in the Baltic Sea area. In fact, the first of these matters brought up at the expert meeting concerned whether the Baltic Sea at all was the right scale to address issues of marine pollution. This question was raised in the opening statement of the FRG, which emphasised that several potentially worldwide intergovernmental initiatives on marine pollution were under way: ‘With regard to our particular tasks concerned with the Baltic Sea,’ the delegate of the FRG continued, ‘we will have to ask whether specific rules are need for the Baltic Sea’ (*supra* note 11). It is a little vague at what the delegation of the FRG precisely was aiming. Yet the course of the meeting showed that the FRG in

11. Verbatim report (unofficial) of the formal sessions at the Meeting of Government Experts for the Preparation of the Baltic Sea Conference on the Marine Environment, Helsinki, 28 May - 2 June 1973 (Archives of the Danish EPA).

particular wished that cooperation on the marine environment in the Baltic Sea should be embedded in the ongoing negotiations in the Intergovernmental Maritime Consultative Organization (IMCO), the precursor to the International Maritime Organization (IMO), which in 1973 led to the signing of the worldwide MARPOL convention. That this was a strong wish can be gauged from the fact that the FRG ahead of the meeting at least had sought support for its view from the Danish government. An internal Danish note summarised the view of the FRG as follows:

Most important is – according to the German view – the question on whether the Baltic Sea should be considered a ‘special area’ in respect to the coming IMCO conference in London on pollution to the sea from navigation. Therefore, one does not wish all aspects of the Baltic Sea pollution to be discussed at the expert meeting, which takes place in Helsinki May 28 – June 2 this year, but in first place only the mentioned IMCO aspect, possibly also the problem about closer cooperation between the Baltic Sea states on combatting oil pollution from tankers.¹²

To be sure, the deliberations for a global convention within IMCO were not merely a concern of the FRG. Alongside the meetings to discuss a convention on the marine environment of the Baltic Sea, an *ad hoc* IMCO working group with participation from all the Baltic Sea states thus discussed common initiatives in respect to the coming IMCO conference. A key feature of the working groups effort was the preparation of a recommendation for the Baltic Sea to be considered as a ‘special area’ within the anticipated MARPOL convention; that is, according to the eventual convention, ‘a sea where, for recognized technical reasons in relation to its oceanographic and ecological conditions and to the particular character of its traffic, the adoption of special mandatory methods for the prevention of sea pollution [...] is required’ (quoted in Fitzmaurice 1992: 135). The findings of the working group were presented to the expert meeting, which decided that the Baltic Sea states together should argue for the Baltic Sea as a ‘special area’ at the IMCO conference.¹³ The Baltic Sea was recognised as a ‘special area’ in the 1973 MARPOL convention. But the other Baltic Sea states did not go along with the wish of the FRG to rely on this and other global conventions, and the FRG followed the majority’s wish for a regional Baltic Sea convention. In hindsight, this can be seen as a wise move, for although signed in the autumn of 1973, the MARPOL convention first entered into force in 1983.

The FRG might have had sound institutional and environmental reasons for its reluctance to establish a special cooperative regime for the Baltic Sea, and so might the other participants in the expert meeting have had for their opposition to the view of the FRG. Of course, both sides of this rather amicable conflict could also have had

12. ‘Tysk henvendelse vedrørende det finske initiativ til en Østersøkonference’, Danish Ministry of Foreign Affairs, note of 4 April 1973 (Archives of the Danish EPA). My translation.

13. ‘Protocol of the meeting of government experts for the preparation of the Baltic Sea conference on the Marine environment’, BSC/PREP/14/Rev.2 of 31 May 1973. The report of the IMCO *ad hoc* working group and its proposals are included as annexes to the protocol.

less environmentally related reasons for their respective positions, for example reasons relating to the geopolitical situation. Other things being equal, which they never are, the central point is in our perspective that both a potentially global MARPOL convention and a regional Baltic Sea convention were relevant spaces – or scales – in which to address the problem of pollution from ships: like the earlier inclusion of the Kattegat, it was a political decision that determined the scale of the negotiations. This political setting of scale was also looming in the next of those aspects of the expert meeting that we shall address in some detail.

Just as in Seidenfaden's note and the Explanatory Memorandum, so was the importance of land-based sources of pollution at the beginning of the expert meeting evoked by several delegates, who seemed to agree that such pollution accounted for some 80 per cent of the pollution to the marine environment of the Baltic Sea. This figure is also recorded by Rotkirch (1984), a senior civil servant of the Finnish ministry for foreign affairs who participated in the expert meeting. And on the second day of the meeting, a Swedish delegate took up an issue that bore on this question:

We should consider *which problems are of international and which of national concern*. Of true international concern is: firstly, the concentrations of stable pollutants such as DDT and PCB in water biota including fish – this may affect the ecology and health and in time cause a decrease in the productivity of fish and bird species (already cod liver cannot be sold in the southern Baltic because of the presence of polychlorinated hydrocarbons); secondly, repeated oil spills, which affect bird life and recreational amenities; thirdly, decreasing oxygen and the accumulation of hydrogen sulphide. (*Supra* note 11, italics added)

Apart from the issue of oil spills, maybe, this list of 'international' environmental concerns echos those of the ICES report (Section 3.1). In the present context, however, the interesting point is how the Swedish delegate interpreted the 'internationality' of the third issue, the question of oxygen reduction in the Baltic Sea. For although mentioning oxygen reduction as an 'international concern', the Swedish delegate was quick to add that there was no clear way to tackle nutrients in effluents 'from an international point of view'; rather, it was 'national action' that was needed, although the Baltic Sea states should 'work together internationally on the monitoring of the situation to see if any agreement may be needed in the future'. The question of oxygen reduction was, in other words, not considered an intergovernmental issue per se.

This interpretation was not a sudden whim of the Swedish delegate, but had also been expressed at the informal Nordic meeting, where Sweden argued that pollution from land through pipelines 'mostly creates national problems' (*supra* note 6, my translation). This view was at least shared by the Danish authorities, who in a memorandum noted that Denmark could support extensive initiatives on stable pollutants and oil pollution from ships, but noted that 'one will not be able to support proposals on both biological and chemical treatment of waste water in order to remove nutritive salts' (*supra* note 7, my translation). This view was also aired by the Danish delegate to the expert meeting, who in response to the Swedish proposition noted the need for scientific cooperation on the question of nutrients and oxygen reduction, but that the

issue for the moment otherwise ‘could be tackled nationally or bilaterally’ (*supra* note 11). The Soviet delegate made a similar point when he noted that the coming Baltic Sea convention ‘should include an article or section which would be devoted to the question of the control of the discharge of polluting agents or pollutants from land’, but, he added:

Such an article should state that *all States shall take upon themselves* the obligation to adopt the measures necessary to prevent the pollution of the sea by substances which come from sewage, industrial areas, populated centres along the coast, and from rivers running through their territories which may cause deterioration in the quality of the sea water. (*Supra* note 11, italics added)

In contrast to the wish of the FRG to approach the question of ship-based pollution to the Baltic Sea as integrated part of measures on the global scale, the question of land-based pollution in this way involved wishes to narrow the spatial scale of cooperation on the marine environment of the Baltic Sea. This does not imply that pollution from land was not considered a serious problem, but rather that the territorial confines of the individual states were seen as the appropriate scale to deal with the problem. The image of the catchment area of the Baltic Sea (Figure 1.4), which later came to epitomise the condition of environmental interdependence in the Baltic Sea, was in other words yet to enter the nascent intergovernmental cooperation on the marine environment of the Baltic Sea. Or, to be more precise, the catchment area was not in an intergovernmental perspective seen as the appropriate scale to address the problem of sewage pollution, which required investments in expensive infrastructures; in respect to the more limited problem of banning the use of stable pollutants like DDT, on the other hand, intergovernmental cooperation could at least in the view of some Baltic Sea states extend to the territory of the individual states. As we shall see in Chapter 5, this interpretation makes stark contrast to the position adopted in the late 1980s. For the moment, however, we shall merely acknowledge this debate on what should be considered ‘national’ and ‘international’ as yet another example of the political setting of scale in the emerging intergovernmental cooperation on the marine environment of the Baltic Sea.

The meeting of government experts in the early summer of 1973 discussed other issues than those I have addressed, for example questions concerning institutional arrangements and relations with existing organisations. Yet the aspects of the expert meeting I have chosen to dwell upon were among those that literally shaped the emerging intergovernmental cooperation on the Baltic Sea and are central to the understanding of the geopolitics of environmental interdependence on which I will embark in the next chapter. Before parting with the expert meeting, however, we may note that the experts concluded their meeting by acknowledging that the ‘protection of the Baltic Sea and its natural resources’ was ‘an urgent task for regional co-operation’. This call for action echoed that of the Visby Conference in 1970, but in contrast to the Visby Conference with its abortive draft agreement, the expert

meeting could in 1973 'agree on the urgent need to convene a Conference on the preservation of the marine environment of the Baltic Sea', which

ought to take an overall approach to the problem and agree upon a convention which could serve as a basis for a comprehensive system for the protection of the Baltic Sea. To this master convention could be annexed detailed rules on specific questions.¹⁴

In fact, in the new political climate the expert meeting could agree that such a conference should be convened before April 1974 and invited the Finnish government to prepare a draft convention to be negotiated by a working group.

3.4 'Collaboration Beyond National Frontiers'

During the winter of 1973-74 various types of experts and government officials met formally on four occasions to prepare a convention on the marine environment of the Baltic Sea, and in March 1974 the fruit of their labour, the Convention on the Protection of the Marine Environment of the Baltic Sea Area, was signed by ministers from the Baltic Sea states at a diplomatic conference in Helsinki – hence, as custom on such occasions prescribes, the nickname 'Helsinki Convention'. I shall spare the reader for a detailed analysis of the legal and institutional aspects of the 1974 Helsinki Convention, which in any case has been addressed by others.¹⁵ Rather, to round off this chapter, I will go through the convention with an eye for those aspects of the cooperative venture that have already been raised in this chapter.

The 1974 Helsinki Convention consisted of a preamble, twenty-nine articles and six annexes, which, in that order, moved from the realm of lofty declarations to highly technical provisions on actual agreements. The articles provided the core of the convention, of course, but we may start with a quick look at the preamble where the parties 'with deep concern' noted 'the increasing pollution of the Baltic Sea Area, originating from many sources such as discharges through rivers, estuaries, outfalls and pipelines, dumping and normal operation of vessels as well as through airborne pollution'.¹⁶ Moreover, it was recognised

14. 'Protocol of the meeting of government experts for the preparation of the Baltic Sea conference on the Marine environment', BSC/PREP/14/Rev.2 of 31 May 1973.

15. Boczek (1978 and 1980) and Fitzmaurice (1992) provides legal analyses of the 1974 Helsinki Convention. Among those who have analysed the convention within a broader political perspective are List (1990, 1991) and Hjorth (1992, 1994), who both relate their analyses to the institutional approach in international relations studies, while Rytövuori (1980) has discussed the convention in relation to the situation of cold war *détente* during the 1970s.

16. 'Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974', signed in Helsinki, 22 March 1974. Reproduced as Annex 1 in Helsinki Commission (1994b). It should be noted that some of the original annexes in this reprint have been changed according to the adoption of subsequent recommendations.

that the protection and enhancement of the marine environment of the Baltic Sea Area are tasks that cannot effectively be accomplished by national efforts only but that also close regional co-operation and other appropriate international measures aiming at fulfilling these tasks are urgently needed.

The parties to the convention acknowledged, in other words, that the marine environment of the Baltic Sea posed a situation of regional environmental interdependence that required regional intergovernmental cooperation. This was also recognised by the minister who signed the Helsinki Convention on the behalf of Finland; in his statement to the diplomatic conference, the minister said: 'The recognition of the fact that we are confronted with problems which derive from special characteristics of this area, and which are wider than the national authorities are able to solve, has led us to the regional approach' (quoted in Fitzmaurice 1992: 49).

The notion that something is 'regional' should stir the conceptual curiosity of any geographer, and the regionality of environmental cooperation in the Baltic Sea area is indeed a question to which we will return (Chapter 6). Presently, however, we shall merely notice that the preamble also recognised that 'other appropriate international measures' could contribute to the environmental efforts in the Baltic Sea area. It is probably not wide of the mark to view this as an allusion to the potentially global MARPOL convention on pollution from ships, which the FRG had campaigned as the appropriate scale in which to address the environmental problems of the Baltic Sea. As we have seen, this bid by the FRG was unsuccessful and the preamble made it clear 'that the relevant recent international conventions even after having entered into force [...] do not cover the special requirements to protect and enhance the marine environment of the Baltic Sea Area'. According to an internal Danish summary from the second preparatory meeting, this mentioning of both regional and international efforts was a compromise. The Soviet Union, Poland and the GDR had favoured the formulation of the Finnish draft convention, which almost exclusively emphasised regional cooperation. Denmark, Sweden and the FRG, on the other hand, wished to mention the need for wider intergovernmental cooperation.¹⁷

Yet common environmental concerns were not the only motivation behind the cooperative venture. We have previously in this chapter seen how cold war politics blocked the early efforts to establish some measure of intergovernmental cooperation on the protection of the marine environment of the Baltic Sea and how the resolution of the 'German question' played no minor part in paving the way for the Helsinki Convention. Also, we have seen how the Soviet delegate to the first expert meeting vocalised cooperation on the marine environment of the Baltic Sea in context of the wider cold war *détente* epitomised by the CSCE process. It should not come as a surprise, therefore, that the final clause in the preamble stated that the parties were:

17. 'Møde i Helsingfors 5.–16. november 1973 til forberedelse af konference vedrørende Østersøens forurening', Danish Ministry of Foreign Affairs, summary of 12 December 1973 (Archives of the Danish EPA).

CONSCIOUS of the importance of regional intergovernmental co-operation in the protection of the marine environment of the Baltic Sea Area as an integral part of peaceful co-operation and mutual understanding between all European States.

Now, it would be rash to lose sight of the environmental ambitions of the Helsinki Convention and simply view it as an instrument of power-political *détente*. Lundqvist is surely correct when he notes that the Helsinki Convention – at the time – was ‘unique in the world as a multilateral effort to protect a commonly enjoyed marine environment’ and that this accomplishment only became more impressive ‘in view of the wide differences in economic, political and cultural characteristics among the seven riparian states’ (Lundqvist 1976: 53). Still, as Hjorth points out, one should keep in mind that the convention ‘was as much a contribution to *détente* politics as an achievement in the field of environmental politics’ (Hjorth 1992: 132).

That cooperation on issues of ‘low politics’ such as environmental concerns in this way can further amicable relations within the traditional spheres of ‘high politics’ is a longstanding argument of the ‘functionalist’ branch within the liberal lineage of international relations studies (Figure 2.1). Cooperation on economic issues to heal the wounds of the second world war in Western Europe is a prime example of functionalism, but cooperation on environmental issues has often been raised as a fruitful avenue for functionalist integration. In some cases, environmental issues may in fact represent the best or even the only avenue. This can well be argued for the Baltic Sea area during the cold war; divided by political, social and economic differences, ‘Ecology and environment stand out as the exception, pleading for regional responsibility’ (Joenniemi and Stålvant 1995: 24). In a sense, this is the sort of reasoning Darst (2001) evokes when he somewhat uncharitably argues that the Soviet Union used intergovernmental environmental cooperation as a means of ‘instrumental manipulation’ to achieve broader political ends (Section 3.2). But such modes of reasoning were not confined to the Soviet Union. As previously noted, environmental cooperation was at least from Finland perceived ‘as an expedient way to create a diplomatic opening to the USSR and East Germany’ (Haas 1993: 148). We may also note that a book on environmental politics in the Baltic Sea area – just as the Berlin Wall was about to come down! – asked the functionalist question: ‘to what extent does regional cooperation on environmental protection and natural-resource utilization serve as a confidence-building measure for the purpose of fostering comprehensive international security?’ (Westing 1989: 1). (For a more recent discussion of relationships between environmental and security themes in the Baltic Sea area, see VanDenveer and Dabelko 1999.)

We may say, therefore, that cold war politics both constrained and enabled the development of environmental cooperation in the Baltic Sea area. And this should alert us to the point that intergovernmental environmental politics is not a discrete activity, but an activity that must be analysed in its wider political and indeed social context. In fact, the particular context of cold war politics was in part responsible for

the initially limited nature of the Helsinki Convention. Before addressing to its limitations, however, we should take note of the advances of the convention.

Turning from the preamble to the articles of the Helsinki Convention, it quickly transpires that it ostensibly took the ‘overall’ approach, which had been the stated ambition of the Finnish Explanatory Memorandum and the first expert meeting. Article 3(1) was thus admirably concise when it on the fundamental principles and obligations simply stated:

The Contracting Parties shall individually or jointly take all appropriate legislative, administrative or other relevant measures in order to prevent and abate pollution and to protect and enhance the marine environment of the Baltic Sea Area.

The convention should, in other words, cover all sources of marine pollution, and this approach was specified by the inclusion of in individual articles on principles and obligations concerning land-based and airborne pollution; on prevention of pollution from ships; on a general prohibition of dumping; and on measures to prevent pollution from activities on the seabed. Also, the parties undertook to ‘counteract the introduction’ of hazardous substances (DDT and PCBs) into the marine environment of the Baltic Sea and drew up a list of noxious substances and materials, which should ‘not be introduced into the marine environment of the Baltic Sea area in significant quantities without a prior special permit [...] by the appropriate national authorities’.

This scope of issues made the convention ‘unique’, Fitzmaurice (1992) argues, since it was ‘the first regional convention for the protection of the marine environment that adopted a “total approach” towards the convention area’ (59). And she is not alone in this evaluation. In his statement to the diplomatic conference, for example, the Danish minister for the environment noted that ‘This Convention is remarkable as the first international instrument that has an all-round comprehensive approach’.¹⁸ (For overviews and discussions of some regional conventions for the protection of marine environments adopted in the 1970s, see Boehmer-Christiansen (1984) and Hayward (1984). Both articles address the Helsinki Convention.)

This was certainly an achievement in its own right, but the ‘overall’ approach of the Helsinki Convention loses some of its gloss if one scrape the surface. Fitzmaurice (1992) distinguishes three types of intergovernmental cooperation on environmental issues like that of the Baltic Sea: the *piecemeal* approach that address one aspect of a larger problem, for example the question of oil pollution to a marine environment; the *framework* approach that provides general principles and provisions that could be applicable to different sources of pollution; and, finally, the *comprehensive* approach, which seeks ‘to cover as much detail as possible, to fill the final picture

18. ‘Statement by Mr Holger Hansen, minister for environment, Denmark, at the signing of the Convention on the Protection of the Marine Environment of the Baltic Sea area’. Diplomatic Conference on the Protection of the Marine Environment of the Baltic Sea area, Helsinki, 18 to 22 March 1974, BSC/INF/11 of 22 March 1974.

in outline immediately, leaving the rest to be filled in at a later date and in accordance with procedures already established in that outline' (Fitzmaurice 1992: 19).¹⁹ Considering that the latter type is modelled on the Helsinki Convention, Fitzmaurice can hardly be wrong when she lodges the same convention within the comprehensive approach. But most analysts are as I inclined to view the convention as a framework (e.g. Greene 1998). Because although the 'final picture' – the 'overall' approach – of the convention was clear and it included quite flexible procedures for changes and amendments, the convention was highly limited in the issues it addressed in any detail and the obligations it imposed on the participating states. Indeed, the statement by the Danish minister for the environment seems to support this interpretation:

It seems to me that while already the rules we set for ourselves in this Convention are a significant step forward in the protection of the Baltic marine environment, it is important to emphasize that these are only first and incomplete steps towards the fulfilment of our objectives. This is the reason why we greet with satisfaction that the whole Convention is build up as a framework within which we will move forwards in increasing co-operation and future strengthened efforts. (*Supra* note 18)

Starting with the focus of the convention, one only has to turn to the annexes with the detailed rules on specific questions to make out its bias. Less than a page was thus devoted to very general declarations on the highly complex question of land-based pollution, to which could be added the page and a half that addressed regulations on hazardous and noxious substances. The annex on the prevention of pollution from ships, on the other hand, took up some sixteen pages and an additional eleven-page appendix of detailed regulations, while the annexes and appendices on exemptions from the general prohibition of dumping and cooperation in the combatting of marine pollution at sea amounted to another eight pages. The number of pages is nothing but an indication, of course. But Seidenfaden was not wide off the mark when he before the first preparatory meeting predicted that progress on the weighty question of land-based pollution to the Baltic Sea would be restricted to 'handsome promissory clauses and declarations of intent' (Section 3.2). For all practical purposes, the Helsinki Convention was in the outset confined to questions of vessel-based pollution and other activities in the waters the Baltic Sea itself.

The emphasis on 'sea' rather than 'land' was overtly geographical, of course, and this geographical distinction was underlined by Article 1 on the convention area. Here, 'for the purpose of the present Convention', the 'Baltic Sea Area' was defined

19. Mitchell (2002) distinguishes between *comprehensive* and *integrated* ecosystem management. An ecosystem approach is for him synonymous with a holistic perspective (cf. Section 1.2). But the comprehensive approach is all inclusive in the sense that the analyst or planner should examine all components and relationships, and a management plan is therefore likely to become a retrospective rather than a strategic document. The integrated approach, on the other hand, concentrates upon key components and linkages, and is in Mitchell's view the best approach to achieve focus for problem solving. We can probably infer that Fitzmaurice's 'comprehensive' approach in Mitchell's distinction is an 'integrated' one. Interestingly, Mitchell evokes Baltic Sea environmental cooperation as a practical example of ecosystem management.

to include the Baltic Proper, the Gulf of Bothnia, the Gulf of Finland and ‘the entrance of the Baltic Sea bounded by the parallel of the Skew in the Skagerrak’. The Kattegat was in other words included in the convention. But unlike the Paris Convention on prevention of marine pollution in the North Sea, which had been signed the month before, the Helsinki Convention explicitly stated that the convention area ‘does not include internal waters of the Contracting Parties’. Internal waters are in international law defined as waters landward of the baseline from which the territorial sea of a state is measured and can include environmentally significant features such as bays, estuaries and harbours (Figure 1.5).²⁰ In the present context, however, the unreserved exclusion of internal waters underlines the extent to which the Helsinki Convention was focussed on sea-based sources of marine pollution. The possibility of extending the convention area to the terrestrial territory of the participating states simply did not enter the convention.

Even in this truncated convention area of the high seas, the obligations levelled on the participating states were modest. At the global scale, we have previously seen how the declarations of the Stockholm and Rio summits sought to address the problem of environmental interdependence, the sovereignty-environment tension, by noting the ‘responsibility’ of states not to cause environmental damage outside their territorial jurisdiction while simultaneously affirming the ‘sovereign right’ of states to exploit their resources according to their own policies (Section 1.3). Legal scholars may argue on how the two sides in this centrepiece of ‘soft’ international environmental law ought to be weighted against one another. But in the regional scale of the Baltic Sea, one does not need a legal mind to fathom that the Helsinki Convention fell heavily on the side of territorial sovereignty. Of course, we have already seen how Article 3 established as a fundamental principle and obligation that the parties ‘individually or jointly’ should ‘take all appropriate legislative, administrative or other relevant measures’ to protect the marine environment of the Baltic Sea. But this vaguely phrased responsibility to take ‘appropriate’ action was a poor match to the sovereign rights layed down in Article 4 on the application of the convention:

2. Without prejudice to the sovereign rights in regard to their territorial sea, each Contracting Party shall implement the provisions of the present Convention within its territorial sea through its national authority.
3. While the provisions of the present Convention do not apply to internal waters, which are under the sovereignty of each Contracting Party, the Contracting Parties undertake, without prejudice to the sovereign rights, to ensure that the purpose of the present Convention will be obtained in these waters.

20. At the time the 1974 Helsinki Convention was concluded, the breadth of the territorial sea was three nautical miles for Denmark, the GDR, the FRG and Poland, four nautical miles for Finland and Sweden, and twelve nautical miles for the Soviet Union (Fitzmaurice 1992). As the first Baltic Sea state, the Soviet Union already in 1960 extended its territorial waters to the twelve nautical miles, which the 1982 United Nations Convention on the Law of the Sea established as the upper limit for territorial seas (Figure 1.5). All Baltic Sea states have subsequently extended their territorial seas up to twelve nautical miles.

In short, the emphasis of the Helsinki Convention was ‘clearly on *individual national actions*’ (Lundqvist 1976: 51). To be sure, the convention established The Baltic Marine Environment Protection Commission – the Helsinki Commission or simply HELCOM – consisting of representatives from each of the contracting states, which was to meet at least once a year. Each of the contracting states was to have one vote in the commission, but that had little importance since the commission should take its decisions unanimously. The commission was, in other words, not vested with any supranational powers. A list of duties was drawn up in the convention, but because of the emphasis on sovereign rights in Article 4, the commission was in effect only authorised to keep implementation of the convention under continuous observation in the high seas; implementation within the territorial waters was the responsibility of the individual states (Boczek 1978). In short, to use the astute formulation of Darst, the ‘limitations stemmed from the fact that while the *substantive* scope of the commission’s purview was exceptionally broad, its *geographical* scope was quite narrow’ (Darst 2001: 58).

Considering that the exclusion of internal waters and the emphasis on sovereign rights were made on the suggestion of the Soviet Union at the second preparatory meeting in November 1973, Hjorth (1992) is undoubtedly correct when he levels this changes on the particular view of sovereignty upheld by the Soviet Union. Then, as now, all the Baltic Sea states adhered to what we have previously termed the ‘formal’ view of sovereignty; that is, the legal emphasis on the formal equality between states, territorial integrity and political independence, and immunity from intervention in domestic affairs (Section 1.1). But the Soviet Union emphasised a particularly ‘strict’ interpretation of formal sovereignty, which did not allow any encroachment on its territory or sovereign rights. This could have presented a severe obstacle to Soviet participation in intergovernmental cooperation on a problem of environmental interdependence, which exactly involves a tension between the spatial extent of territorial sovereignties and an environmental problem. Yet, Hjorth points out, as long as the Soviet Union

could control the supply of information to the Helsinki Commission, and the sovereignty restriction permitted no intervention whatsoever in national policies, or policies concerning the territorial waters or internal waters, the cooperation could not impinge on the strict sovereignty doctrine. (Hjorth 1992: 155; also Darst 2001)

This interpretation is supported by an internal Danish summary of the second preparatory meeting, which noted that the emphasis on sovereign rights in Article 4 had been made ‘because of the Soviet Union’s opposition to allow the convention any direct application on Russian [*sic!*] territory’ (*supra* note 17, my translation).

The Soviet doctrine of ‘strict’ sovereignty is certainly the reason for the explicit exclusion of internal waters (not to mention terrestrial territories) and the emphasis on sovereign implementation in the text of the Helsinki Convention. Yet it would in my analysis be wrong only to hinge the limited achievements of the convention on

this feature of ‘high’ politics. We have seen, for example, how Seidenfaden before the first preparatory meeting (with misgivings) noted that Denmark probably would be just as unwilling as other Baltic Sea states to accept international commitments on land-based sources of pollution before it was much further in its domestic resolution of sewage and waste water problems. Also, we have seen how the Swedish delegation at the meeting itself raised the same issue when it noted that the problem of nutrient salts from land was difficult to tackle ‘from an international perspective’ and required ‘national action’. Rotkirch is therefore on to something when he notes:

In 1974 the states participating in the Diplomatic Conference recognized that pollution from land-based sources forms the greatest threat to the marine environment of the Baltic Sea area. However, it was also realized that the prevention of such pollution is scientifically, technically and economically very complicated. (Rotkirch 1984: 11)

Being a civil servant with the Finnish ministry for foreign affairs and a participant in the preparation of the Helsinki Convention, it is hardly surprising that Rotkirch skirts the tender question of sovereignty – and the role of the Soviet Union. But his remark and the primary sources of this chapter suggest that we also should look for more mundane reasons behind the initially limited results of the Helsinki Convention.

This brings us back to the question of context. Students of intergovernmental and world politics regularly draw sweeping conclusions on *the* factor behind a concrete event; in fact, considering the easy by which events are reduced to given abstractions, such scholars often provide archetypical examples of ‘pseudo-concrete research’ (Sayer 1992: 238). But disentangling the wide-ranging context of an event like the signing of the Helsinki Convention is a task that all too easily amount to a study in its own right. Therefore, we can only hope to pick out some contextual signposts in the early identification of the Baltic Sea as an environmental space. Cold war politics – with its subsets of the ‘German question’, *détente* and the strict Soviet sovereignty doctrine – was in this respect clearly of central importance. But this spectacle of ‘high’ politics should not divert us from the less spectacular influences of ‘low’ politics, which included domestic priorities and financial considerations.

At the first meeting of government experts to prepare the 1974 Helsinki Convention, a delegate from the FRG declared that ‘we should show the world that collaboration can take place beyond national frontiers’ (*supra* note 11). There is no reason to doubt the idealistic intentions of this statement. And yet, if the statement is taken literally, the delegate proved more of a levelheaded realist than he probably meant to be. As we have seen in this chapter, the parties to the Helsinki Convention had for some time recognised that the marine environment of the Baltic Sea posed a situation of environmental interdependence that required urgent and ‘overall’ action. For reasons of ‘high’ as well as ‘low’ politics, however, the convention was in effect limited to sea-based sources of pollution and otherwise restricted to individual actions of the participating states within their sovereign territories. The 1974 Helsinki Convention was indeed *beyond* ‘national frontiers’. But this was the political-

geographic straitjacket in which cooperation on the environment of the Baltic Sea unfolded until the late 1980s. Before turning to that part of the history of environmental cooperation in the Baltic Sea, which is the subject of Chapter 5, it is time for a step in the abstract discussion of environmental interdependence as geopolitics.

Chapter Four

Scaling Environmental Spaces

The parties to the 1974 Helsinki Convention adopted a 'regional approach' to address the problem of environmental interdependence in the Baltic Sea area in an 'overall' manner. The 'regionality' of such cooperation is a topic that will be addressed in the final chapter. But as an appetiser, which also sets the topic for this chapter, we can at this point take note of Westing's conclusion that 'the region of concern in relation to environmental problems is defined (delimited) largely by ecological factors rather than by political or other social factors' (Westing 1989: 113). It is always wise to chuck in a cautious 'largely' in scholarly conclusions. Yet I will in this chapter take a step to propose that Westing's conclusion in fact should be turned on its head: regions of environmental politics are largely (but not exclusively) delimited by political and other social factors rather than ecological ones.

By suggesting that Westing's conclusion should be reversed, one only need a rudimentary knowledge of contemporary philosophy of science to grasp that I am leaning – dangerously, maybe – towards social constructionism. And it is indeed from the realm of constructionism that I take the cue for the argument I will develop in this chapter. Therefore, the first section begins with a brief introduction to some main tenets of 'constructionism' before moving on to consider Hajer's particular contribution to the study of environmental politics. Hajer provides a well-structured example of constructionism, but my primary reason for examining this contribution is Hajer's argument that environmental politics critically depend on the establishment of a 'discursive closure' that gives meaning and aim to particular political projects.

Following this cue, I will in the second section argue that environmental politics also rest on the production of a 'spatial enclosure' to situate a particular environmental problem. As this is likely to be a process found in all sorts of politics, we shall speak of 'environmental enclosures'. This argument is developed from the critical investigation of scale in recent geography, which is translated to the politics of environmental interdependence by means of elements from the concrete analysis of Baltic Sea environmental cooperation in Chapter 3. In short, I will propose that the 'environmental spaces' addressed in situations of environmental interdependence are not given, but are identified and 'enclosed' through a process of scaling.

Finally, the third section turns to the criticism levelled at the application of constructionism to environmental issues. For our purpose, this debate is evoked as a springboard to discuss the ontological status of environmental enclosures, and I will in this respect propose that such enclosures should be seen as temporarily fixed scales, which are produced (rather than 'constructed') at the intersection between

metaphorical representations and material realities. Following the second part of the concrete analysis in Chapter 5, this argument will in Chapter 6 be inserted into a wider argument of the constitution of 'environmental regions'.

4.1 The Politics of Discursive Closure

Some years ago, three prominent geographers hailed constructionism as one of 'the most vibrant and exciting areas of research in the social sciences and humanities today' (Thrift et al. 1995: 1). This comment was made with particular reference to the study of science as social construction, but the amount of scholarly output on all kinds of 'social constructions' suggests a far wider resonance for this view. Later in this section, for example, we will see how the constructionism has reached studies of environmental politics. And also the critical investigation of scale in recent geography, which is addressed in the next section, owes something to constructionism.

For all the writing on social constructions, however, we may just as well from the start admit that 'constructionism' is a notoriously slippery notion. Most obviously, this slipperiness relates to the anti-foundational attitude to epistemology in most constructionism: if one discards the notion of a foundation for knowledge, it hardly makes sense to speak of a singular constructionism. (For a wonderful account of what the anti-foundational impetus might imply for the writing of an intellectual history of constructionism, see Lynch 1998). But any attempt to get to grips with constructionism is also complicated by the affinities between this and other methodological-philosophical movements in the social sciences. A decade or so ago, for example, the basics of the constructionist outlook would probably have entered the annals as 'post-modernism' (Rosenau 1992), but constructionism may just as well appear in guises such as discourse analysis or post-structuralism, or be subsumed under the rubric of the linguistic or cultural 'turn' in the social sciences. And then, of course, one might find affinities between constructionism and other philosophies of the more or less distant past; some would argue, for example, that constructionism is the contemporary enactment of Berkeleian or Kantian idealism (Collier 1998). In short, therefore, constructionism appears to resist a conventional urge to construe histories of thought:

Understood in its own terms, the constructionist movement might best be described as a fragile coalition of marginal, nomadic academic bands. The knowledge produced by these bands is stitched together less by adherence to a body of dogma, technical protocols, master narratives or clear-cut ideologies than by a tolerance of diverse 'voices'. (Lynch 1998: 14)

This been said, it is nonetheless possible to discern some affinities within the loosely defined constructionist movement. In fact, it can be argued that constructionists over the years have construed what comes precariously close to a master narrative.

As already noted, the cornerstone in the constructionist movement is its *anti-foundational* approach to epistemology, which is to say theories of knowledge; in the words of a proponent, ‘social constructionism is not so much a foundational theory of knowledge as an anti-foundational dialogue’ (Gregen 1995: 18). This is not the place to rehearse the history of philosophies of science. In short, however, we may say that the anti-foundational stance of constructionism is directed at the search for epistemological certainty, which is said to have characterised modern philosophy of science. If ‘positivism’ habitually is awarded the dubious honour of being the most conspicuous recent manifestation in this quest, Descartes is rarely challenged as the *locus classicus*. Indeed, it is Descartes Bernstein (1983) evokes when he famously describes the search for epistemological certainty as driven by a ‘Cartesian Anxiety’ – that is, in brief, a fear that science without any secure foundation for its knowledge is doomed to intellectual and moral chaos, radical scepticism and self-defeating relativism (the inclusion of cognitive *and* moral dimensions is deliberate). Stated somewhat bluntly, the constructionist movement is in the business of turning this Cartesian Anxiety on its head by showing that the search for secure foundations of knowledge is futile or even oppressive.¹ Knowledge, whether lay or learned, is instead seen as socially constructed and therefore implicated in modes of domination as well as struggles for liberation. As such, constructionism is hovering in or around the Foucaultian notion of power/knowledge (Burr 1995: 62-78).²

The work of Foucault is at best opaque. Yet it is fair to say that his oeuvre orbits around power, not least the interweaving effects of power and knowledge, which makes him a (sometimes embattled) figurehead in the loosely defined post-structural approach to power (Clegg 1989; Thomsen 2000). In this and other respects, the work of Foucault is a source of much scholasticism. But if we seek refuge in the interview he gave on ‘truth and power’, we find a relatively lucid exposition of Foucault’s notion of power/knowledge when he argues that ‘truth isn’t outside power, or lacking in power’; rather, ‘Each society has its régime of truth, its “general policy” of truth: that is, the types of discourses which it accepts and makes function as true’ (Foucault 1980: 131). By describing truth – or simply knowledge – as implicated in societal regimes within power, Foucault dismisses a Cartesian urge for foundational knowledge and highlights its intense political nature. His notion of power/knowledge

1. We may in passing note that anti-foundationalism can become an anxiety in its own right. In his influential book on critical geopolitics, for example, Ó Tuathail sets out to ‘elaborate some “methodological” principles’ for his approach (Ó Tuathail 1996: 63). But putting ‘methodological’ in inverted commas is not enough; what could be termed an anti-foundational anxiety drives Ó Tuathail to add a note explaining that such ‘methodological principles cannot be considered in any way akin to orthodox scientific procedural rules’ (Ó Tuathail 1996: 270). This is a small curiosity, of course, which does not subtract from Ó Tuathail’s valuable contribution to critical geopolitics.

2. In a harsh critique, Bredsdorff (2002) identifies Foucault as the ‘obligatory detour’ in constructionism. This is not wide off the mark. From a much more sympathetic position, and with a healthy dose of self-irony, Jørgensen and Philips thus remark that ‘Foucault has become a figure to quote, relate to, comment on, modify and criticise’ (Jørgensen and Phillips 2002: 12). The next paragraph is my main detour around Foucault.

should therefore not be confused with Bacon's classic 'knowledge is power', which divorces between the knowing subject and the object of knowledge. Rather, Foucault proposes a conception of humans as simultaneous subject and object of knowledge (Gordon 1980). This makes for an intricate approach to power. On the one hand, Foucault would clearly reject the actor orientation of conventional power theory; as he has it in another interview, 'I don't believe that [the] question of "who exercise power?" can be resolved unless the other question "how does it happen?" is resolved' (Foucault 1988b: 103). Because of his emphasis on the latter question, Foucault is often criticised for his anti-humanism, a stance one also finds in many constructionists' uneasy position on the role of human agency (Burr 1998). Yet he is also critical of those strains of (Marxist) structuralism that brushes knowledge posits off to the realm of 'superstructure'. For Foucault, it is rather that knowledge as discourses, representations or simply 'regimes of truth' are the powerful structures in which our social world is produced and objects attain their individual identities. Instead of a focus on the *location* of power in actors or structures outside the power/knowledge nexus, Foucault emphasises the intricate *relations* of power and knowledge:

'Truth' is to be understood as a system of ordered procedure for the production, regulation, distribution, circulation and operation of statements. 'Truth' is linked in a circular relation with systems of power which produces and sustain it, and to effects of power which induces and which extend it. A 'régime' of truth. (Foucault 1980: 133)

While individual constructionists may articulate it otherwise, and set themselves against one or even all of Foucault's manifestations, it is essentially such 'regimes of truth' they endeavour to destabilise by showing that they are socially constructed and therefore embroiled in power relations. In spite of the label, constructionism is at heart about the *deconstruction* of the taken-for-granted.

But the 'anti-foundational dialogue' of constructionism is often accompanied by a more elaborate programme:

Primary emphases of this dialogue are placed on the following: the social-discursive matrix from which knowledge claims emerge and from which their justification is derived; the value/ideology implicit within knowledge-positions; the modes of informal and institutional life sustained and replenished by ontological and epistemological commitments; and the distribution of power and privilege favoured by disciplinary beliefs. Much attention is also given to the creation and transformation of cultural constructions; the adjudication of competing belief/value systems; and the generation of new modes of pedagogy, scholarly expression and disciplinary relations. (Gregen 1995: 18)

For some, this quotation may only reveal that constructionism like any other school of thought has developed a particularly coded discourse – a new mode of 'scholarly expression', maybe. But Gregen's summary is in my view quite comprehensive and I will not try to translate the individual points into yet another discourse; the points that are relevant for my argument will in any case be explicated as we proceed.

Yet Gregen's brief reference to ontology, theories (or meta-theories) about what exists, begs a short comment on another tenet lurking in some constructionism. For the anti-foundational epistemology of constructionism often blend with a notion of *anti-essentialism* (Sayer 2000). The two are difficult to separate and are often confused, but anti-essentialism suggests that phenomena and events cannot be reduced to certain fixed properties, essences, that determines their character. And essences, of course, belong to the realm of ontology, a terrain many constructionists enter only on a mission of deconstruction. On the face of it, this appears reasonable: if one reject the notion of a secure foundation for knowledge it seems coherent also to reject the notion of a reality involving essences. This would be the extreme version of what Eden (1998) in relation to the constructionist literature on environmental issues terms the 'relativist trap' – not only the foundations of knowledge but also reality itself is seen as 'socially constructed' in an immaterial sense. Few constructionists would in fact subscribe to a constructionist position like this, which would amount to ontological idealism. But this image of constructionism is often evoked in the cruder criticism of constructionism, and constructionists are partly to blame since they are often (deliberately) unclear about the meaning of their claims. The problem of relativism is a point to which we will return in the final section of this chapter.

If anything, these cursory points on highly complicated issues should reveal that constructionism is no simple matter. So rather than persisting in shuffling around abstractions in an exercise that all too easily produces not-existing constructionists and otherwise, I will in a moment adopt the strategy from Chapter 2 of pursuing a 'grounded review'. This will allow us to return to some of the issues that have been raised on a more specific basis. Before leaving the realm of generalisations, however, we should take note of what I believe to be the most important accomplishment of the constructionist movement. For whatever the criticism that can be levelled at the anti-foundational and anti-essential impetuses of constructionism, the movement has from this basis helped to further a critical approach to the *status quo* by questioning what otherwise might be taken for granted: 'a primary use of "social construction" has been for raising consciousness' (Hacking 1999: 6).

In this limited sense, constructionism is just another label for a critical approach to social inquiry, which, in part, is about standing back from the existing order and question how it came into being (Chapter 2).³ In fact, when one considers the extent to which many declared constructionists modify the epistemological and ontological claims that could be read the position, they could just as well describe their approach as 'critical' social science. This would not quell criticism for the most ardent propo-

3. In the sense of Cox introduced in the opening of Chapter 2, critical approaches are also about how the existing order may be changed and how that change may be influenced or challenged. As Burr (1998) points out, it is precisely as active proponents of change that constructionists often disappoint, probably because sustainable proposals for change could be seen to involve a reification of alternative constructions. While certainly well-intentioned, the standard constructionist proposal that we should be sensitive to 'difference' and allow for 'other' – preferably 'marginal' – 'voices' frequently begs as many questions as it answers (but, of course, that might be the point of the exercise).

nents of a ‘problem-solving’ perspective, but a more restrained use of ‘construction’ might save us from much of the sometimes heated debate on constructionism within critical social science, for example the frequent controversies over the ontological status, the reality, of environmental problems (Section 4.3). Partly for this reason, I do not consider my approach to be ‘constructionist’. This chapter will nonetheless involve much construction talk, partly because the literature from which I take my prompts is framed more or less explicitly in constructionist terms, but also because constructionists got a point; as Litfin notes with particular reference to the politics of environmental interdependence, ‘there is a disconcerting tendency among both practitioners and analysts to naturalize environmental problems’ (Litfin 1999: 360).

Constructionism and Environmental Politics

One of the several realms where constructionism has made an impact is in the study of environmental issues within the social sciences. In its most fundamental form, this application of constructionism involves claims about the ‘social construction of nature’ (Demeritt 2002), which typically question the longstanding dualism between society and nature (Gerber 1997). The most radical contribution this literature is probably actor-network theory, which does away with the nature-society duality by theorising animate as well as inanimate objects as equal ‘actants’ in complex, ever-changing and heterogeneous networks (e.g. Latour 1989). But there are other variants of constructionism in this debate, which, like actor-network theory, all have their merits and pitfalls (for a sympathetic but critical review, see Demeritt 2002).

Partly as an outcrop of the often ontological deliberations on the relationship between humans and nature, a more epistemological literature has increasingly begun to investigate knowledge-claims in environmental politics, in particular the role of science. In the words of a review of some of this literature,

work in social constructionism and related approaches has analysed environmental knowledge as the product not merely of scientific practices but also of research cultures and the negotiation between science and policy, between science and its publics and between claims to authority. (Eden 1998: 425)

That this is a controversial debate can be gauged from the fact that Demeritt’s (2001) recent article on science and the social construction of global warming spurred one of the reviewers, a natural scientist, to take the unusual step of writing a critical reply (Schneider 2001). This can be seen as a skirmish in the wider ‘science wars’, which reached a zenith – or a nadir – when Sokal hoaxed *Social Text* with a faux constructionist article (Flyvbjerg 2001). Much of this debate is bogged down in misunderstandings on what is claimed to be ‘socially constructed’, and, of course, the ever present spectre of relativism – the Cartesian Anxiety is by no means a relic of the past. But rather than submerging ourselves in this intricate debate, we shall for the moment take a brief look at the core of the constructionist argument about know-

ledge-claims in environmental politics, which may serve as a prelude for a more detailed investigation of Hajer's particular contribution.

A central component in constructionist work on environmental knowledge is a critique of the 'linear model' of policy influence, which assumes a one-way flow of information from science to policy and society. Instead, environmental issues are seen to emerge in the mutual negotiation and (re)construction of environmental knowledge between scientists, policy-makers and other 'issue entrepreneurs' (Hannigan 1995). In the words of two prolific contributors to this literature, 'environmental issues is as much a matter of the social construction and policies of knowledge production as it is a straightforward reflection of biophysical reality' (Buttel and Taylor 1994: 232).

The realisation that issues do not present themselves as ready-made objects for politics is not particular to the environmental realm, of course. But it can with some justification be argued that the process of 'constructing' issues is especially salient in environmental politics, which is set at the intersection between nature and society, between science and politics, and therefore involves a multitude of actors, interests and world-views. In Dryzek's simple but instructive formulation, environmental politics is not only complex but confronted with 'two orders of complexity':

Ecosystems are complex, and our knowledge of them is limited, as the biological scientists who study them are the first to admit. Human systems are complex too, which is why there is so much work for the ever-growing number of social scientists who study them. Environmental problems by definition are found at the intersection of ecosystems and human social systems, so one should expect them to be doubly complex.

The more complex a situation, the larger the number of possible perspectives upon it – because the harder it is to prove any one of them wrong in any simple terms. (Dryzek 1997: 8)

Environmental debates are, in other words, inter-discursive par excellence. In that perspective, one could expect environmental politics to be a Babel of actors speaking along different and often mutually unintelligible lines. Yet, Hajer (1995) argues in an influential study, it is the 'communicative miracle' of environmental politics that they somehow seem to understand one another. For Hajer, this suggests the existence of 'authoritative narratives' on environmental problems, narratives that provide a rough definition of (or metaphor for) the issue in question on which actors at least, so to speak, can agree to disagree. Such narratives are in Hajer's analysis conceptualised as *story-lines* that serve the central political task of reaching a *discursive closure* in environmental debates. I will in the following pursue Hajer's argument a little further, not because his approach is exceptional or without its problems, but because his study is a well-structured example of the constructionist position and because the notions of 'story-line' and in particular 'discursive closure' are useful stepping stones for the argument I will develop in the next section.

Hajer (1995) set out to analyse the evolution of 'ecological modernisation' – the view that environmental concern is compatible with economic growth – through a comparative study of the development of acid rain policies in the Netherlands and Britain. In doing so, however, Hajer develops an analytical framework, which is

easily transferred to other aspects of environmental politics and, indeed, political analyses in general (e.g. Ó Tuathail 2002). This framework starts from the constructionist position that environmental politics because of its inter-discursive nature ‘critically depend on the specific social construction of environmental problems’ (2). Therefore, the focus should be on the ‘constitutive role of discourses in political processes’ (58) where politics becomes a ‘struggle for discursive hegemony in which actors try to secure support for their definition of reality’ (59).⁴

We are in other words entering the province of discourse analysis, which has constructionism as a key premise (Jørgensen and Phillips 2002). In fact, the many variants of discourse analysis can to some extent be distinguished from one another by their degree of constructionism. The ‘critical discourse analysis’ associated with Fairclough is for example characterised by its insistence on the existence of an extra-discursive or material dimension to social life (Chouliaraki and Fairclough 1999). Laclau and Mouffe, on the other hand, could be seen to represent a more clean-cut constructionist position when they declare that their analysis ‘rejects the distinction between discursive and non-discursive practices’ (Laclau and Mouffe 2001: 107). As we will see in the final section of this chapter, Hajer is a little vague on this question. For the moment, however, we shall return to his argument.

The ‘struggle for discursive hegemony’ does not take place in a vacuum, Hajer argues, but in the context of existing institutional practices. Discourse analyses should therefore in his view address two things: first, the way in which discourses are routinely reproduced in a situation of hegemony, and, second, those moments when routinised transactions are interrupted. The latter, Hajer conceptualises as moments of discursive ‘interpellation’. Not surprisingly, these moments become analytical nodal point as we here encounter the struggle for discursive hegemony. During such periods of discursive interpellation, a discourse can be said to have become hegemonic when it satisfies the conditions of discourse ‘structuration’ and ‘institutionalisation’. Discourse structuration is reached when the credibility of actors require them to draw on ideas, concepts and categories related to a particular discourse, while a discourse institutionalisation is achieved when the discourse is translated into political practices and institutional arrangements. This is for Hajer how a *discursive closure* is realised in the inter-discursive complexity of environmental debates. And a discourse closure, he argues, is the ‘first and foremost’ requirement in the regulation of a problem, because ‘the problem needs a definition that gives policy-making a

4. Hajer’s use of the martial ‘struggle’ is well in line with the taste for military terminology in some social theory, for example de Certeau’s (1984) use of ‘strategy’ and ‘tactics’. Such plays on conceptual meanings can be effective. Yet I find Hajer’s use of the muscular ‘struggle’ a little misplaced, for the political drive towards a definition of reality may – also for those directly involved – appear amicable and characterised by congenial compromises. This does not imply the absence of potential or latent conflicts in the ‘negotiation’ of a particular aspect of reality, but may suggest the extent to which a perception of reality has become entrenched; environmental politics may, as Clegg notes on male/female relations, be ‘subject to a surplus of meaning over and above whatever interpretations particular participants might put on an instance of them’ (Clegg 1989: 149).

proper target' (22). We might say that a discursive closure turns an environmental problem into an object, a 'thing' on which it is possible to debate and act.

This process of discursive objectification is in Hajer's terminology achieved through the establishment of *story-lines*, which he specifies as 'narratives on social reality through which element from different domains are combined and that provides actors with a set of symbolic references that suggest a common understanding' (62). The point of a story-line is that actors from a variety of discursive domains can evoke the story-line as a whole by uttering a specific element. Story-lines can thus be seen as metaphors for a particular problem, which allows scientists, environmentalists, politicians and other actors to illustrate where their work fits into the inter-discursive jigsaw. Therefore, story-lines first of all fulfil the functional role of facilitating a reduction of the discursive complexity of a problem. Second, when accepted by more and more actors, they get a ritual character and provide some permanence to particular debates by rationalising a particular approach into what appears as a coherent problem. Finally, story-lines allow different actors to expand their knowledge and competence beyond their own expertise and experience. For Hajer, story-lines are therefore 'essentially political devices that allow the overcoming of fragmentation and the achievement of discursive closure' (62). In this perspective, policy-making

is in fact to be analysed as the creation of problems, that is to say, policy-making can be analysed as a set of practices that are meant to process fragmented and contradictory statements to be able to create the sort of problems that institutions can handle and for which solutions can be found. Hence policies are not only devised to solve problems, problems also have to be devised to be able to create policies. (Hajer 1995: 15)

Constructionists like Hajer have thus sought to reveal a subtle political process preceding the overt wrangles over particular environmental problems, a process in which an issue is discursively identified and given meaning as an object for politics.

4.2 The Politics of Spatial Enclosure

For the moment I have little to add to constructionists' argument on the discursive objectification of environmental problems. Rather, my interim concern in this section is to accentuate that this process of political objectification also involves a spatial dimension. But we can approach this question by way of Hajer's concepts of 'story-line' and 'discursive closure' introduced in the previous section.

First, and for the time being somewhat as a parenthesis, it should be noted that spatial representations can function as effective metaphors – symbolic points of reference – for highly complex socio-environmental relationships. Such representations would be meaningless without a supporting meta-discursive 'story-line', of course. But their suggestive power may by virtue of the status of visual representa-

tions in Western consciousness – what Jay (1988) describes as the ‘scopic regime’ of modernity – be stronger than that of their story-line. An example to which we will return is the recurring use of the image of the drainage basin of the Baltic Sea to signify the condition of environmental interdependence in that area (Figure 1.4). But one may also think of how the Apollo space photos of a ‘whole Earth’ in the early 1970s allegedly became icons of the emerging environmental awareness (Figure 1.3; Cosgrove 1994), or how satellite images of the Antarctic ‘ozone hole’ in the 1980s played an important role in accelerating the negotiations to ban ozone depleting substance (Litfin 1994). The potential power of spatial representations is a point to which we will briefly return in Chapter 6.

It is in relation to Hajer’s notion of ‘discursive closure’ that we find the stepping stone for the argument I will pursue. We have previously seen how the environment since round about 1970 increasingly has been understood in terms of spatially bounded ecosystems (Section 1.2). But we have also noted that the bounding of such systems is a thorny task, in part because ecosystems are geographically slippery:

From the top down an ecosystem is a part of the biosphere; from the bottom up it is the organisms interacting with other organisms and nonliving features of their shared habitat. Some may even term the entire biosphere an ecosystem. Others may note that an organism such as a human serves as a habitat for a variety of other species, together with some nonliving material as in the gut, so that a single human may rate as an ecosystem. It is an elastic concept – not only with respect to scale. (Regier 1993: 3)

Sachs makes a similar point when he underlines that ecosystems come in many sizes, which are nested like babushka dolls from the microscopic to the planetary level; the notion is, in other words, ‘free-ranging in scale’ (Sachs 1992: 32).⁵

It would be presumptuous for a social researcher to suggest that environmental scientists are unable to devise sound methods to delineate of particular ecosystems. But the scalar ambiguity of ecosystems has political implications: ‘To manage ecosystems, or utilize ecosystem principles,’ Ward notes, ‘boundaries must be known’ because ‘managers and policymakers must be able to identify and agree upon the entity to be conserved’ (Ward 1998: 84). Ecosystem thinking requires, in other words, that a problem is categorised by area rather than type, for example the protection of the Baltic Sea rather than a particular species. Following this lead, I will suggest that environmental politics not only dependent on a ‘discursive closure’ to put policymaking on track, but also on a *spatial* or *environmental enclosure* to situate the problem. The process of identifying an environmental problem as an ‘issue-area’ should thus be taken literally, not least in situations of environmental interdependence where spatial ecosystems are seen to collide with the equally spatial state-

5. To avoid misunderstandings, it should be reiterated that I use ‘ecosystem’ as shorthand for approaches that emphasise complexity and interdependence between the animate as well as between the animate and inanimate (Section 1.2). The term ‘ecosystem’ was not at the fore in early cooperation on the marine environment of the Baltic Sea, for example, but the cooperative venture was nonetheless guided by an ecosystemic mode of reasoning (Chapter 3).

system. Because of the scalar ambiguity of ecosystem thinking, however, I will argue that such enclosures are not simple reflections of the environmental reality: the scale of an enclosure is not a given. To me, this suggests that the process of enclosing instances of environmental interdependence should be approached as an aspect of what geographers over the past decade or so have discussed as the ‘politics of scale’.

Scale and the Politics of Scale

Geographical scale, understood as bounded spaces of varying size in a hierarchical or nested relationship, is a familiar notion within geography and the social sciences more generally. But in the social sciences, and until recently also in geography, scale is predominately taken either as the product of research methodologies or simply seen as an unproblematic given. This is very evident in the debate on the so-called ‘level-of-analysis problem’, which intermittently has raged in international relations studies since the ‘behaviouralists’ in the 1950s began their quest for scientific rigour within the field (Figure 2.1). There are many nuances to this debate (Singer 1961; Yurdusev 1993; Buzan 1995). Yet it is not wide off the mark to say that much of the debate is about fixing the appropriate ‘level’ for the development of international relations theory in spatial terms. Most scholars will thus accept at least three possible ‘levels’ – the individual, the state and the Westphalian state-system. Some have proposed various intermediate ‘levels’, but it hardly takes a geographer to recognise the spatiality of this basic scheme; in Buzan’s pointed observation, such schemes

focuses on levels as units of analysis organized on the principle of *spatial scale* (small to large, individual to system). The term ‘levels’ does suggest a range of spatial scales of ‘heights’. In this sense, levels are locations where both outcomes and sources of explanation can be located. They are *ontological referents* rather than sources of explanation in and of themselves. (Buzan 1995: 204, italics added)

Buzan makes this observation as a point of clarification. In doing so, however, he provides a near-perfect example of the usual approach to scale in the social sciences: there might be disagreement on the precise number of scales, but the basics of the scalar scheme is taken for granted and, as often as not, naturalised as something that can be abstracted from the reality to which it refers. Scales become ontological referents. When Young (1995) addresses the problem of scale in human-environment relationships, for example, his ‘theoretical puzzle’ is how to reconcile the literature on environmental institutions developed in the ‘local’ and ‘international’ scale; the scales themselves are taken for granted.⁶ More often than not, as we for example

6. In preparation of the Institutional Dimensions of Global Change programme, Young (and Underdal) in 1996 asked for a literature review of scaling issues in the social sciences (Gibson et al. 1998). The report does not address the critical investigation of scale in recent geography, but provides an interesting review of conceptualisations of scale in ecology and a range of social scientific fields. As such, the report suggests that Young and other institutionalists are aware that scale is not a simple matter. Still, the report is marked by institutionalists’ ambition to construe universal and predictive

have seen in the discussion of institutionalism in Chapter 2, international relations scholars give ontological priority to the scale of the territorial state and that of the associated Westphalian state-system; Walker has a point, therefore, when he declares mainstream international relations studies to be ‘one of the most spatially oriented sites of modern social and political thought’ (Walker 1993: 13). From the ranks of political geography, Agnew (1994) has levelled a similar criticism at the implicit spatial ontology of much international relations theory, which he describes as caught in the ‘territorial trap’ of the modern state. Until it was revived with a critical edge in the late 1970s, however, political geography was generally equally guilty of adopting the territorial state as the unproblematic scale for what was considered ‘political’ (Taylor 1982).

Criticising the state-centrism – and more or less explicit spatial ontology – of conventional international relations studies and political geography is a stable feature of the critical perspectives within both academic fields, of course. But this short exposition may serve as an illustration of how spatial scales typically are taken for granted and in the process accorded ontological status. Broadly speaking, the recent literature on scale tries to invert this understanding of scale, because: ‘Research scales do not simply exist in the minds of researchers; they are socially produced from the material activity of doing research’ (Jonas 1994: 260). In a broader sense:

The common ground of this body of research is that geographical scale is conceptualized as socially constructed rather than ontological pre-given, and that the geographical scales constructed are themselves implicated in the constitution of social, economic and political processes. (Delaney and Leitner 1997: 93)

The ontological priority is, in other words, shifted to the social processes in which scales are constituted (Swyngedouw 1997). For the present purpose, the insight of the scale literature can be summarised into three interrelated propositions.

(1) As just alluded, scale is in the recent literature approached as constituted in social practices. This is variably described as the social ‘production’ or ‘construction’ of scale, and other terms are regularly thrown in. The often erratic use of ‘construction’ is an issue we have brushed previously in this chapter and to which we will return in respect to scale. For the moment, however, we shall merely acknowledge that the scale literature on the most general level share a view of scale as both an outcome and a medium of social relations and therefore historically changeable: ‘Geographical scale is conceptualized as both a contingent and as an emerging property of sociospatial processes’ (Leitner et al. 2002: 286).

In this limited sense, the scale literature is simply a particular (re)articulation or refinement of ideas hatched by radical socio-spatial theorists in the 1970s and 80s (e.g. Gregory and Urry 1985). The development of socio-spatial theory is a vast and

theories (Section 2.1) and revolves around the question of how scale can be conceptualised in such theories. This contrast with the critical scale literature, which, as we shall see shortly, is not about the identification of particular scales but the process of scaling itself.

varied topic, of course. And the complexity of this body of literature has been fuelled by the adoption of theoretical perspectives as varied as materialism, humanism and post-structuralism, which involves very different (and often unclear) conceptions of space and the socio-spatial relationship (Simonsen 1996). Yet it is not too much of a simplification to say that socio-spatial theory is united in a critique of what Sack (1974) terms the 'spatial separatist' theme in geography; that is, in short, views that hold the possibility of approaching the 'spatial' independent of the 'nonspatial'. Such views are very apparent in classic regional geography and quantitative spatial science (Peet 1998). But by treating scale as a given or the product of research methodologies, we could also say that conventional uses of the term represents expressions of spatial separatism (although usually by default rather than design). In contrast, socio-spatial theories argue for conceptions of space where space and social relations are seen as dialectically interrelated: space (and time) is always and everywhere social, *and* society is always and everywhere spatial (and temporal). In short, therefore, the scale literature is in its outset part-and-parcel of other socio-spatial theories: 'Scale, like space itself, is not a neutral or static container within which social relations are situated, but one of their constitutive dimensions' (Brenner 1998: 28).

(2) It is in the second proposition that the politics of scale literature becomes a distinct articulation of socio-spatial theory. Much socio-spatial theory is about 'horizontal' relations in space. When Paasi (1991) addresses the institutionalisation of regions, for example, he is primarily concerned with the emergence and reproduction of regions as horizontally differentiated spaces shaped by particular material, symbolic and institutional contents. As a compound to such familiar concerns with 'horizontal' orderings, the scale literature is about the 'vertical' ordering of space (Collinge 1999). In this perspective, it is not so much the content and horizontal differentiation of particular spaces and places that is central, but the process in which such spaces and places are produced and contested within a multiplicity of vertically nested scales; the focus is on 'the production, reconfiguration or contestation of particular differentiations, orderings and hierarchies *among* geographical scales' (Brenner 2001: 600). In sum, therefore, the politics of scale literature is – or ought to be – about the social processes of scaling events, subjects and relations in a plurality of possible scales, which are vertically nested within one another.

(3) By acknowledging that geographical scales are constituted in social relations and that this process of scaling takes place within a multiplicity of possible scales, we are already well into the third proposition, the 'politics of scale' itself: if scales are seen as socially produced, then, clearly, they are also entangled in power relations. But we may probe the politics in the production of scale a little further.

At one level of abstraction, in the domain of discourse, the politics of scale is implicated in what Swyngedouw (1997) terms 'scalar narratives', which 'provides the metaphors for the construction of "explanatory" discourses' (139). To illustrate this, Swyngedouw uses the example of the 1995 collapse of Barings Bank. In the finest social-scientific resolution, an explanation for that event could be anchored at

the scale of the body of Nick Leeson, the fraudulent 'rogue trader'. But an explanation could also be fixed to the scale of the Singapore Money Exchange that did not in time intervene in Leeson's dubious dealings, or that of the London City where an antiquated banking elite could not handle an entrepreneurial whizz-kid playing the lucrative derivatives market. At a somewhat larger scale, the collapse of Barings could be pinned at the regulatory failure of the Bank of England. Finally, the blame could also be fixed at the global scale, where the money markets had grown increasingly volatile after the collapse of the Bretton Woods system in the early 1970s. The point is, of course, that each of these scalar narratives has bearings on the collapse of Barings. But the scales of such explanatory narratives are socially produced and are by no means innocent or without political ramifications. In this example, the specific production of scale could involve consequences as far apart as criminal prosecution of the Leeson body or a major overhaul of the global monetary system, which again subserves particular political projects. Therefore, if 'story-lines' are about reaching a 'discursive closure' to define a problem for policy (Section 4.1), we could say that 'scalar narratives' are about situating a problem spatially, or, in our terminology, to establish an 'environmental enclosure' for policy.

As already implied, the politics of scale is not just a matter of lofty narratives, but also about concrete social practices and relations of power: the production of scale involves the exercise of power and can be seized as a means of counter-power. This is the issue that spurs Smith when he states:

Geographical scale is political precisely because it is the technology according to which events and people are, quite literally, 'contained in space'. Alternatively, scale demarcates the space or spaces people 'take up' or make for themselves. In scale, therefore, are distilled the oppressive and emancipatory possibilities of space, its deadness but also its life. (Smith 1990: 173)

Therefore, and to some extent as a spatial parallel to Hajer's stress on the discursive 'struggle' to define reality (Section 4.1), Smith accentuates that 'the true contest concerns the locus of the power to determine the scale of the struggle: who defines the place to be taken ... and its boundaries' (Smith 1990: 174). The territorial 'power containers' of nation-states (Taylor 1994) are probably the best example of a scale that has been 'fixed' as a site of control and potentially oppression. Activists, on the other hand, are much favoured examples of actors that have been empowered by taking their struggle from a local scale to the global scale (Herod and Wright 2002). Smith has influentially termed the latter as the 'jumping of scales', by which he means a strategy to 'resist oppression and exploitation at a higher scale – over a wider geographical field' (Smith 1993: 90). In Smith's conception, the jumping of scale is clearly a progressive socio-spatial strategy. But the jumping of scale is also a potent strategy for actors, which critical geographers might not view as favourably as activists and oppressed people: transnational corporations are all about jumping scale, for example, and in the prelude to the 2003 war against Iraq, the Bush admini-

stration sought to ‘jump’ the problem of the Saddam Hussein regime from an Iraqi or Middle Eastern scale to a global one.

Much of the politics of scale literature approach the socio-spatial process of scaling in terms of struggles. Yet if we accept the Foucaultian notion that power is not inherently ‘repressive’ but omnipresent and productive, then, surely, there should be more to the politics of scaling than simply a struggle of control and liberation.⁷ Smith edges towards this question when he notes that scale is ‘double-edged’:

By setting boundaries, scale can be constructed as a means of *constraint and exclusion*, a means of imposing identity, but a politics of scale can also become a weapon of *expansion and inclusion*, a means of enlarging identities. (Smith 1993: 114, italic added)

The insertion of ‘weapon’ before expansion and inclusion suggests that Smith still is in the terrain of struggles. And of course, as we for example in the previous chapter saw in the early development of environmental cooperation in the Baltic Sea area, even cooperation can be implicated in some form of struggle. Yet I will in the final chapter suggest that the scaling of environmental spaces – to some extent, at least – can be ‘good’ in a wider meaning than simply the exercise of progressive counter-power. For the moment, however, we can with Swyngedouw summarise the politics of scale by acknowledging that ‘scale mediates between cooperation and competition, between homogenization and differentiation, between empowerment and disempowerment’ (Swyngedouw 1997: 145).

As one could expect, maybe, ‘scale’ and ‘politics of scale’ have become buzz-words in recent economic, social and political geography. But these notions are often simply thrown in as mere synonyms for other spatial terms: Tired of region, locale, domain, territory and other dusty concepts from the recesses of geography – try scale and you’ll make the pages of *Society and Space*! The very useful scalar concepts may, in other words, lose some of their analytical edge. This is a problem Brenner (2001) has given some thought. In the simplest conception, he points out, scale is used to connote a relative differentiated and self-enclosed geographical unit. In such cases, scale is used for what we previously termed a ‘horizontal’ ordering of spaces and is thus simply added to geographers’ already voluminous vocabulary for bounded units; ‘territory’ would be better, for example, if one wishes to describe an area used in ‘the attempt by an individual or group to affect, influence, or control people, phenomena and relationships, by delimiting and asserting control over a

7. ‘If power were anything but repressive, if it never did anything but to say no, do you think one would be bought to obey it?’ Foucault asks and answers: ‘What makes power hold good, what makes it accepted is simply the fact that it doesn’t only weight on us as a force that says no, but it traverses and produces things, it induces pleasure, forms of knowledge, produces discourses. It needs to be considered as a productive network which runs through the whole social body, much more than as a negative instance whose function is repression’ (Foucault 1980: 119; also 1988b). Allen (2003) is in my view correct in arguing that many geographers overlook this enabling aspect in Foucault’s conception of power.

geographical area' (Sack 1986: 19).⁸ To employ scale in a sense that one can speak of 'politics of scale', however, we should be dealing with the 'vertical' ordering of space, which according to Brenner entails a process of scaling in which bounded spatial units are produced, reconfigured and contested within a 'hierarchy' of possible scales.⁹

Scaling and Enclosing Environmental Interdependence

Such a process of scaling is precisely what is implicated in environmental politics involving some notion of ecosystem thinking. In the development of cooperation on the marine environment of the Baltic Sea, for example, we have so far in Chapter 3 seen at least four instances of scaling.

(1) The first of these instances of scaling occurred before the formal negotiations and concerned the question whether the Kattegat should be included as part of the Baltic Sea. As we have seen, this inclusion was adopted without opposition or much debate. This was a minor issue in the negotiations, of course, but the inclusion of the Kattegat illustrates the important conceptual point that the scale of environmental interdependencies like that of the Baltic Sea area is not given by nature. (2) The second instance surfaced during the first preparatory meeting when the FRG disputed whether the environmental problems of the Baltic Sea should be addressed in a regional convention or, as the FRG preferred, at the potentially global scale of the MARPOL convention. This view was not shared by the other Baltic Sea states and the FRG went along with the majority to adopt the 'regional approach'. Whatever the underlying reason, however, the FRG in fact attempted to 'jump' scale by taking the issue to a wider geographical field. (3) If this bid by the FRG was an attempt to upscale the problem of marine pollution, the third instance in the scaling of environmental cooperation in the Baltic Sea area was in effect an attempt to down-scale the issue. This concerned whether the weighty problem of tackling effluents from land was an 'international' problem. Most explicitly by Sweden, it was argued that such problems were 'national' and therefore should be addressed by the individual states within their terrestrial and marine territories. (4) This brings us to the final instance of scaling in early Baltic Sea environmental cooperation. For although the 1974 Helsinki Convention formally encompassed all sources of marine pollution, whether from land or sea, the convention was in practice restricted to ship-

8. The term 'territory' (and 'territoriality') is not selected at random, but because the term in my view is subject to conceptual slippage similar to that of 'scale' (and 'politics of scale'). For a criticism of some uses of 'territoriality', see Cox (1991) – and the reply by Steinberg (1994).

9. The notion that scales make up a hierarchy is frequent in the writings of Brenner and other contributions to the scale literature. Nielsen and Simonsen (2003) argue that this is because much of the literature approach the question of scale from 'above', from the vantage point of 'globalisation'. This is somewhat unfortunate since the notion of a scalar hierarchy may privilege the global scale at the expense of more local ones. Like Nielsen and Simonsen, I therefore prefer to view the relationships between different scales as nested rather than hierarchical.

based pollution in the limited scale of the extra-territorial waters. This marked the spatial enclosure in the early phase of intergovernmental cooperation on the marine environment of the Baltic Sea.

This process of scaling is specific to the development of environmental cooperation in the Baltic Sea area, of course. Yet I will propose that the case of the Baltic Sea illuminate a more general feature in the geopolitics of environmental interdependence. The important point is in this respect that an approach to environmental issues in terms of ecosystems involves a delineation of a relative bounded geographical area (Section 1.2). Because of the scalar ambiguity of ecosystems, however, this delineation is by no means a simple matter but is implicated in processes of scaling between the microscopic and the planetary. I cannot pass judgement on scientists' ability to scale ecosystems. In environmental politics, however, the example of the Baltic Sea suggests that the scale adopted to address an environmental problem is not simply given by some environmental logic; structured by environmental, economic and political realities, such problems are rather scaled in a political 'negotiation' between a multitude of possible scales. The outcome of this process of scaling, what I term a spatial enclosure, is in essence the 'freezing' of a particular scale, which temporarily identifies an environmental problem as a geographical object for policy.

4.3 The Social Construction of What?

I have in this chapter taken my cue from constructionists' argument on the discursive objectification of environmental problems and sought to emphasise that this process also involves the setting of scale. The application of constructionism to environmental issues has been the subject of considerable criticism and debate, however, so it is at this point appropriate to establish how my argument relates to constructionism. This is a tricky issue and it should from the outset be acknowledged that I neither can, nor will, solve the sometimes heated debates between 'constructionists' and 'realists' in social scientific studies of environmental politics. These debates usually concern the ontological status of environmental issues and, by implication, to what extent one can make or challenge knowledge claims on such issues with reference to a material reality. My aim in this study is not to address the correspondence between representations and material referents, however, but to explore the politics involved in the spatial objectification of environmental problems. This entails that I mostly move at some distance from questions of materiality. Yet the question of the relationship between representations and material referents is too important to be left to the winds. As we will see, most constructionism on environmental issues is not as radical as some might fear, and will more often than not include at least a brief curtsy to the reality of environmental problems. This section is such a realist curtsy, but it is a deep one that should put constructionism behind us.

To approach the question of constructionism, and thus my derived argument on the scaling of environmental interdependence, we can follow Hacking (1999) in his reflection on the upsurge of analyses of all kinds of ‘social constructions’ and ask the timely question: the social construction of *what*? Most constructionists will agree, Hacking argues, that the recognition of *X* as a social construction implies that *X* need not have existed or need not be at all as it is; *X* is, in other words, not determined by nature. This inserts a degree of relativism, which in some respects is liberating, for example of *X* is an aspect of identity – gender, sexuality, ethnicity and so on. Even fierce critics of constructionism will acknowledge this point (e.g. Sayer 2000). But in environmental politics, as in many other spheres, the lurking if not outright relativism of constructionism is disturbing for those who insists that environmental debates can and should be related to the material or extra-discursive reality. Gandy (1996) argues, for example, that the drift towards relativism in constructionism may lead to an over-reliance on the role of language in environmental explanations. To be sure, Gandy recognises the importance of the constructionist criticism of instrumental reasoning. Yet he argues that its epistemology ‘weakens rather than strengthens the analysis of the causes of environmental change by cutting off social discourses from physical reality’ and thus ‘denying the independent agency of nature’ (36). This is problematic, ‘because the relations between nature and culture involve biophysical systems which are not reducible simply to culturally mediated meanings’ (37).

Gandy is by no means the only to question the more or less intended drift towards relativism in constructionist studies of environmental issues, and the attempts to resolve or at least clarify the debate are no fewer. Judged by the literature devoted to this issue, one might in fact get the impression that contemporary social scientific research of environmental issues is populated by ‘naive’ realists and ‘nothing-is-real’ constructionists.¹⁰ Yet, as Burningham and Cooper (1999) point out, most empirical constructionist analyses actually employ a ‘mild’ approach that does not cast doubt on the reality of environmental problems. The position of Hajer is an example of this. As we have seen in the first section of this chapter, Hajer works explicitly within a constructionist mode of reasoning. This is necessary, he argues, because a

realist approach assumes incorrectly that the natural environment that is discussed in environmental politics is equivalent to the environment “out there.” This assumption fails to recognize that we always act upon our images of reality and are dependent on certain discourses to be able to express ourselves. (Hajer 1995: 16)

Yet Hajer is quick to stress that this ‘should not be misunderstood as an argument that denies the existence of severe ecological problems’. Rather, the point is that

10. Burr (1998) is probably correct when she notes that the ‘naive’ realist no longer exists in the social sciences, at least, I would add, among reasonably reflective practitioners. Similar, Hacking (1999) argues that the dreaded universal constructionist is almost impossible to find. Both figures frequently appear in the literature, however, but it can with much justification be argued that the ‘naive’ realist is as much a convenient puppet in constructionism as the ‘nothing-is-real’ constructionist is among those inclined towards realism.

any understanding of the state of the natural (or indeed the social) environment is based on representations, and always implies assumptions and (implicit) social choices that are mediated through an assemblage of specific discursive practices. (Hajer 1995: 17)

If only a brief aside in his study, this admission to the ‘existence’ of environmental problems, and the quick qualification that the natural environment is ‘mediated’ through the representations of discursive practices, does indeed suggest that Hajer endorses a ‘mild’ variant of constructionism (and, it should be added, operates with a very simplistic notion of ‘realism’). Other constructionists make similar curtsies to the reality of environmental problems. Hannigan is thus at pains to emphasise that his perspective ‘does not deny the independent causal power of nature but rather asserts that the rank ordering of these problems by social actors does not always directly correspond to actual need’ (Hannigan 1995: 30). Similar, if more cautiously, Demeritt states: ‘Demystifying scientific knowledge and demonstrating the social relations of its construction involves does not necessarily imply disbelief in either that knowledge or the phenomena it represents’ (Demeritt 2001: 310).

So what is this ‘mild’ constructionism? Hacking (1999) provides an entry to this question when he urges us to probe *what* is seen as socially constructed. It is thus often more than vague whether a constructionist claim concerns what he terms ‘ideas’ or ‘objects’; in a more formal language, this could also be presented as a distinction between constructionist claims on ‘signifiers’ – words and images – and ‘referents’ – the physical or discursive objects we speak or write about (Sayer 2000). Much of the often heated debate on constructionism boils down to misunderstandings on this issue. To take an example close to our subject matter, one can easily imagine the gut reaction of an oceanographer to the very title of Steinberg’s interesting book, *The Social Construction of the Ocean*. But contrary to what our hypothetical oceanographer with some justification might think, it is the human ideas about the ocean as a social space and not the ocean as a material object Steinberg approaches as socially constructed; as he points out in the end of his book, ‘one should not forget that the sea, besides being a socially constructed space, is also a material space of nature’ (Steinberg 2001: 209).¹¹ We should, in other words, be careful whether a constructionist claim concerns an aspect of reality or our ideas about reality.

Distinctions like that between ideas and objects are difficult ones. For the present purpose, however, it is a helpful analytical distinction that enables us to discern two basic types of constructionism. What many critics fear in environmental studies is the ‘strong’ variant of constructionism, which according to Sayer ‘claims that objects or referents of knowledge are nothing more than social constructions’ (Sayer 2000: 90). Such constructionists – if they really exist – make claims on the socially constructed

11. In view of the extent to which Steinberg relies on historical materialism, he – or his publisher – is in my reading precariously close to jumping a constructionist bandwagon by including ‘social construction’ in the title. This been said, however, the book can be seen as a valuable contribution to the scattered attempts to develop a political geography, which retains the materialism of ‘radical’ geography while acknowledging the focus on representation in ‘critical’ geography. The most explicit contribution to this endeavour is probably still that of Agnew and Corbridge (1995).

nature of objects, for example the environment, and belong to what Collin (1998) terms the ontological thesis in constructionism. This thesis might be found in the sociology of scientific knowledge, which is the focus of Collin and much of the social construction of nature debate (Section 4.1). But we have already noted that the ontological thesis is difficult to discern in empirical analysis of environmental issues. The vast majority of these studies only claim that our ideas about objects are socially constructed and make up what Collin (1998) describes as the epistemological thesis in constructionism. Following Sayer, this thesis ‘merely emphasizes the socially constructed nature of knowledge and institutions, and the way in which knowledge often bears marks of its social origin’ (Sayer 2000: 90). Demeritt, for instance, is unusually explicit in his epistemological constructionism when he acknowledges that his variant of constructionism is

ontologically realist about entities, but epistemological antirealist about theories (what we designate as ‘electrons’ has an ontologically objective existence, but our conception and classification of it are socially contingent). (Demeritt 2001: 311)

In short, therefore, it can be argued that the *X* considered a social construction, and thus not given by nature, in most empirical constructionist studies is our ideas about the environment and not the environment as a real object. These studies are, in other words, not anti-essentialist when it comes to the ontological existence of the environment/nature, ‘only’ anti-foundational on epistemological status of knowledge about the environment/nature (Section 4.1). But in environmental studies, if not more generally, this is still an untenable stance. To be sure, constructionists have made an important contribution by destabilising the environment/nature as a taken-for-granted object and helped to counter simplistic conceptions of nature-society relations, which in the extreme may result in environmental determinism. The risk is, however, that a well-founded fear of environmental determinism reverts into social (or cultural) determinism. In the words of Soper:

Constructivists clearly dislike any reference to ‘nature’ for fear of lending themselves to biological determinism and its political ideologies. But to take all conditioning away from nature and hand it to culture is to risk en-trapping ourselves again in a new form of determinism in which we are denied any objective ground for challenging the edict of culture on what is or is not ‘nature’. (Soper 1996: 30-31; also Sayer 2000: 102)

Constructionists may, in other words, end in what Pedersen (1996) terms ‘over-socialised semiotics’, which cannot capture the material significance of nature and environmental problems.

As conceded in the opening of this section, my current aim is not to investigate systematically the correspondence between environmental realities and political representations. Yet my argument on the scaling of environmental interdependencies could be extended to include a feature like that. Therefore, if only briefly, I will put forward my position on the construction question. Like most contemporary social

scientists, I accept the constructionist argument that knowledge is fallible and bound up in power relations. The real point of contention is the epistemological question whether our ideas speak more of the object of knowledge or the knowing object (Proctor 1998). Implicitly or explicitly, constructionists will usually in their anti-foundational approach to epistemology opt for the latter. But this closes the door on the possibility of making and challenging knowledge with reference to an extra-discursive physical and, indeed, social reality. Therefore, I opt for the position of critical realists like Sayer, who emphasises that 'the social character of knowledge does not mean that it cannot successfully identify real objects (including social constructions) which exist independently of the researcher' (Sayer 2000: 90). Given the social character of knowledge, however, such explanations do not represent Truth. Yet an explanation can in Sayer's formulation be more or less 'practically adequate' in the sense that it generates 'expectations about the world and about the results of our actions which are actually realized' (Sayer 1992: 69). The justifications for these arguments are intricate. Short of treading these philosophical tracks, which would take us well beyond what is needed in the present context, I will simply record that this is a necessary position: I fully agree with Proctor's point when he, albeit in a moment verging on pragmatism rather than critical realism, states: 'Truth-claims concerning the state of nature may not be a *sufficient* condition to justify environmental action, but they are in many cases a *necessary* condition' (Proctor 1998: 353).

This brings us back to the question of scaling environmental interdependencies and the ontological status of environmental enclosures. Like a 'discursive closure', which according to Hajer are established by the formation of meta-discursive 'story-lines', so is an environmental enclosure clearly shaped in a social process, the process of scaling an environmental issue. Environmental enclosures could thus be described as 'social constructions', but only in the trivial sense that they are constituted in social practices rather than simply given by nature. This implies that environmental enclosures can be challenged and changed through social action. Actions like that may disregard the material reality, but in what Lidskog (1998) calls a basic 'reality-kicks-back realism', such actions may prove less practically adequate to deal with environmental problems and, possibly, disputes in environmental policies. For example, even the parties to the 1974 Helsinki Convention would probably concede that its enclosure – the high seas – was environmentally less adequate than, say, an enclosure including territorial waters and land; in fact, as we will see in the next chapter, Baltic Sea environmental cooperation was in the latter part of the 1980s rescaled into a more adequate enclosure. To an extent, then, environmental enclosures can be seen as spatial metaphors that temporally situates environmental problems geographically. But such geographical metaphors must, or can, be related to the material reality. Therefore, environmental enclosures should be seen as temporal outcomes in fluid processes of scaling an environmental issue at the intersection between the metaphorical *and* the material; environmental enclosures are socially *produced* in a context of material (and discursive) structures. Notably, how-

ever, these material structures are social as well as physical. The limited enclosure of the 1974 Helsinki Convention, for instance, was as much or even more structured by economic and geopolitical realities as by knowledge of the environmental reality. This was also a prominent feature of the second phase in the development of environmental cooperation in the Baltic Sea area, which is the subject of the next chapter.

Chapter Five

‘The Baltic Sea – Our Common Sea’

The signing of the 1974 Helsinki Convention was a small feat. The convention was thus among the first intergovernmental agreements to address large-scale environmental problems within a geographically specified area in an ‘overall’ rather than ‘piecemeal’ manner – that is, allonge lines approaching the world-view epitomised by the ecosystem concept (Section 1.2). Also, this cooperative venture was achieved at a time when environmental issues barely had reached the governmental let alone intergovernmental agenda, and took place in the sensitive context of cold war politics. Yet, as we have seen in Chapter 3, the convention fell somewhat short of its ambition. The aspiration for an ‘overall’ approach was inscribed in the convention, for sure. But actual commitments were confined issues in the extraterritorial waters of the Baltic Sea, while the weighty problems relating to activities in territorial waters and particularly on land were left to the discretion of the participating governments. This trend endured for more than a decade. From the late 1980s, however, environmental cooperation in the Baltic Sea area was both intensified and widened, and elements of these developments were subsequently formalised in the revised Helsinki Convention of 1992.

These developments is the theme of this chapter, which picks up on the history of Baltic Sea environmental cooperation where we left it in Chapter 3, and follows it to the signing of the 1992 Helsinki Convention. The first section is thus devoted to the environmentally cautious period from the signing of the 1974 convention until round about 1988. The second section covers the years from 1988 to 1992 where intergovernmental environmental activities in the Baltic Sea area were intensified, emphasising, in particular, that this involved the re-scaling of Baltic Sea environmental cooperation. Finally, the third section outlines how the 1992 Helsinki Convention formalised several of these developments, and discusses some trends for the future spatiality of Baltic Sea environmental cooperation.

5.1 In the Interim

Anybody with just a cursory interest in intergovernmental cooperation will know that it is one thing to sign a convention and quite another to get it ratified. Signed in 1973, the International Convention for the Prevention of Pollution from Ships (MARPOL) was for example first ratified by sufficient states to enter into force in 1983 and had at that point already been the subject of substantial revisions. If not quite as slow in

coming, the 1974 Helsinki Convention was no exception from this 'tradition' of slow ratification. The convention was thus to enter into force two months after its ratification by the final of the seven signatories, but this was first achieved in May 1980 following the ratification by the Federal Republic of Germany (FRG) in March 1980.

Boczek (1980) discerns two reasons for the relative slow ratification. First, he notes, but does not quite explain, that Poland and the Soviet Union encountered 'financial and technological difficulties' that put off their ratification until the end of 1979. Second, Boczek points to a particular problem faced by the two European Community (EC) members, Denmark and the FRG. In 1976, after the signing of the Helsinki Convention but well before the ratification process took off in earnest, the EC adopted an internal directive on the regulation of land-based pollution. Following the general interpretation of EC rules, this implied that EC member states lost their powers to enter treaties on that issue with third parties. And as land-based pollution in principle also was part of the Helsinki Convention, so was Denmark and the FRG faced with the dilemma of having either to give up their participation in the convention or to brake EC rules. Denmark solved this problem by adding a declaration to its July 1977 ratification calling upon the other Baltic Sea states to allow the EC accession to the convention, and the FRG subsequently followed a similar course.¹ This solution was greatly helped by the fact that the Council of Ministers already in June 1977 decided to seek EC accession to the Helsinki Convention. Yet the granting of this wish by the EC was some years off. Most directly, this was due to the simple fact that the Soviet Union until 1987 refused to recognise the EC officially. But according to Greene (1998), the road to accession was also blocked by Sweden, which regarded the EC as a 'laggard' on agreements to prevent sea pollution. The slow but eventual accession of the EC to the Helsinki Convention is a point to which we will return.

The parties to the Helsinki Convention could hardly have foreseen these turns of events; at a press conference after the signing in March 1974, for instance, the Danish minister for the environment declared that the Danish Parliament would ratify the convention within its session of the same year.² Yet the parties must have had a hunch that the ratification could take some time. The signing of the convention was thus accompanied by the adoption of a resolution on the formation of a provisional working group, the Interim Commission, which was to manage Baltic Sea environmental cooperation until the permanent commission could be established. Like the permanent commission to be, so was the Interim Commission set up as a meeting of representatives from all the participating states that were to convene at least once a year. The Interim Commission was given the immediate tasks of preparing draft rules of procedure and financial rules for the future commission, to examine scientific

1. Still, Pehle notes, it is 'a remarkable point that Denmark was able to get out of the dilemma three years before Germany. Evidently, the regulatory interests of the federal government with respect to environmental policy were not yet particularly marked in the 1970s' (Pehle 1997: 191).

2. Danish Environmental Protection Agency, internal note on the ratification procedure for the Helsinki Convention, 27 March 1974 (Archives of the Danish EPA).

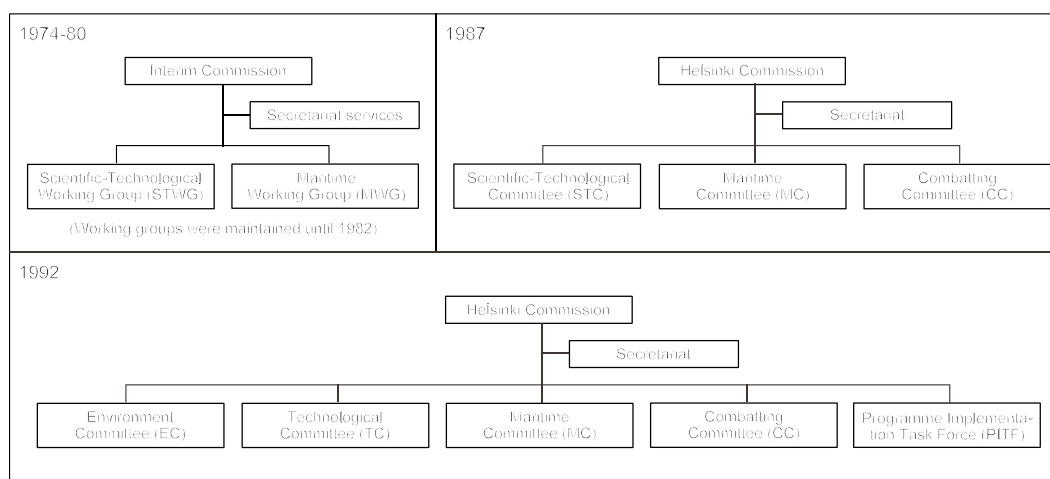


Figure 5.1 Stages in the organisational development of the Helsinki Commission.

problems to be addressed in the future, and to review the available scientific evidences. But it could also 'consider any other issue presented to it by Member Governments'.³ On the invitation of the government of Finland, which provided secretariat services during the interim period, the first meeting took place in November 1974. And the Interim Commission altogether had to convene for six of its annual meetings before it in 1980 could hand over and report to the permanent Baltic Marine Environment Protection Commission – the Helsinki Commission or simply HELCOM.

As alluded in the heading, the period cover in this section – roughly from 1974 to 1987 – can be seen as 'interim' in a wider sense than simply that intergovernmental environmental cooperation on the Baltic Sea for six years was governed by the Interim Commission. Most will thus agree that we have to look to the late 1980s before the cooperative venture took off in earnest. Still, we shall pause with the first decade or so in the history of the Helsinki Convention, focussing on the developing organisational form of the Helsinki Commission and the recommendations it adopted. Such issues would be central to institutional analyses of the sort pursued in international relations studies (Section 2.1), and Baltic Sea environmental cooperation has in fact been the topic of several such analyses and discussions.⁴ Yet the aim of this section is by no means to lay the foundations for an institutionalist analysis. Rather, if in a roundabout way, we shall use the organisation of the commission and its recommendations as a window on the early spatiality of Baltic Sea environmental cooperation. We may in this respect begin with organisational form (Figure 5.1).

The lack of sufficient scientific knowledge on the state of the Baltic Sea environment was a frequent complaint during the preparation of the Helsinki Convention,

3. 'Interim Commission', Resolution 7, adopted by the Diplomatic Conference on the Protection of the Marine Environment of the Baltic Sea Area, Helsinki, 12–22 March 1974. Reprinted as Annex 1 in Helsinki Commission (1981).

4. Among the studies that discuss Baltic Sea environmental cooperation in terms of international institutions (or regimes) are: Greene (1998), Haas (1993), Hjorth (1992, 1994, 1996), Lane and Jensen (1996), List (1990, 1991), and Ringius (1996).

and as noted above, this concern was also reflected in the tasks given the Interim Commission. Appropriately, therefore, the first meeting of the Interim Commission established a working group to appraise scientific and technological matters, the Scientific-Technological Working Group (STWG); also, if not as clearly mandated by its founding resolution, the second meeting of the commission established a Maritime Working Group (MWG) to consider measures relating to prevention of pollution from ships and combatting of marine pollution (Helsinki Commission 1981.) These working groups were essentially carried over to the permanent commission as the Scientific-Technological Committee (STC) and the Maritime Committee (MC). Within these standing committees, much of the actual work was conducted through various expert and working groups, and the committees and the commission itself also convened seminars and established *ad hoc* groups for particular purposes. To co-ordinate and administer the work of the commission and its subsidiary bodies, a small international secretariat was established in Helsinki. The size of the secretariat slowly increased over the years, reflecting a steady widening of the commission's scope. Yet the secretariat remained (and remains) relatively small, suggesting that the member states wished to keep the Helsinki Commission as an intergovernmental institution rather than letting it evolve into an organisation that could act independently.

The evolving organisation of the Helsinki Commission was far more complex than just described, and organisational matters were at some points the topic of considerable debate (Hjorth 1992). For our purpose, however, the main lines in organisational structure of the Helsinki Commission are sufficient for a first peek into its early geographical focus. We have thus in Chapter 3 seen that although the parties to the 1974 Helsinki Convention recognised land-based pollution as the main problem, the ostensibly 'overall' convention was in practice strongly skewed towards sea-based sources of pollution. This bias was also reflected in the organisational structure of the interim and subsequently permanent Helsinki Commission. To be sure, the STWG and later the STC should consider matters in relation to land-based pollution. But this task was predominately directed at environmentally indirect measures such as establishing standards for harmful discharges, scientific cooperation, and coordination of monitoring. The tangible environmental measures – as far as they went during the early years – were mainly hatched in the sea-directed MWG and its successors, the MC.⁵ And this seawards bias also skewed the organisational chart when a standing expert group on the combatting of pollution at sea (particularly oil) in 1987 was elevated to committee status as the Combatting Committee (CC).

5. This been said, one should not underestimate the role of transnational scientific cooperation. Darst (2001) argues, for example, that the Helsinki Commission provided Soviet scientists a valuable context for 'subterranean learning'. This links to wider literature on the role of 'epistemic communities', which holds that transnational groups of specialists with common beliefs wield important influence in the formation of intergovernmental institutions (Haas 1990). In an aside, Haas (1993) claims that 'epistemic communities' only play a minor role in Baltic Sea environmental cooperation, but Hjorth (1994 and 1996) has taken some steps in analysis of such communities.

Table 5.1 Focus of recommendations adopted by the Helsinki Commission, 1980-1996.

	Land	Sea		Land	Sea		Land	Sea
1980	0	15	1986	5	7	1992	12	3
1981	1	7	1987	3	2	1993	6	4
1982	3	2	1988	10	1	1994	4	1
1983	1	3	1989	5	6	1995	9	2
1984	2	2	1990	7	6	1996	9	4
1985	7	7	1991	4	5	<i>Total</i>	88	77

This bias towards the sea was also reflected in the recommendations adopted by the Helsinki Commission during its first decade. As discussed in Chapter 3, the 1974 Helsinki Convention was essentially a framework – a legal skeleton to be filled in along the way. On a practical level, this was in particular done by two means. The convention was thus from its inception furnished with several *annexes* with provisions on particular environmental issues. These annexes were an integral part of the convention, but the convention allowed for a procedure according to which annexes could be changed without involving a formal process of ratification by the parliaments of the participating states. This procedure was only used occasionally. The more common way for the parties put meat on the legal framework of the convention was (and is) to adopt *recommendations* to the governments of the contracting states. These recommendations were in practice worked-out and agreed upon in the subsidiary bodies of the commission. And since these bodies included representatives from all the participating states and followed the convention's general rules of unanimity, so could the commission subsequently usually simply add its formal stamp of approval to the recommendations.

The number of recommendations is a crude indicator, of course. A recommendation can thus concern an insignificant environmental issue, but it will carry the same weight as a recommendation on a significant issue. This is not the place to assess the environmental significance of the recommendations adopted during the early phases of the Helsinki Commission, let alone the extent to which they were translated into actual actions. Rather, we shall take the recommendations as a simple but suggestive indicator for the spatial focus of the Helsinki Commission during its first decade. And the trend is in this respect plain to see. At the inaugural 1980 meeting of the permanent commission, the Interim Commission could thus present a total of sixteen recommendations proposed by the MWG, which it had already adopted or decided to recommend for adoption (Helsinki Commission 1981). Fifteen of these recommendations eventually entered the ledger of the Helsinki Commission, and were either concerned with ship-based pollution or clean-up of oil pollution at sea. Recommendations on land-based sources of pollution, on the other hand, were notable only by their absence (Table 5.1). Over the following years the Helsinki Commission slowly began to adopt recommendations on land-based issues. Yet it was first during

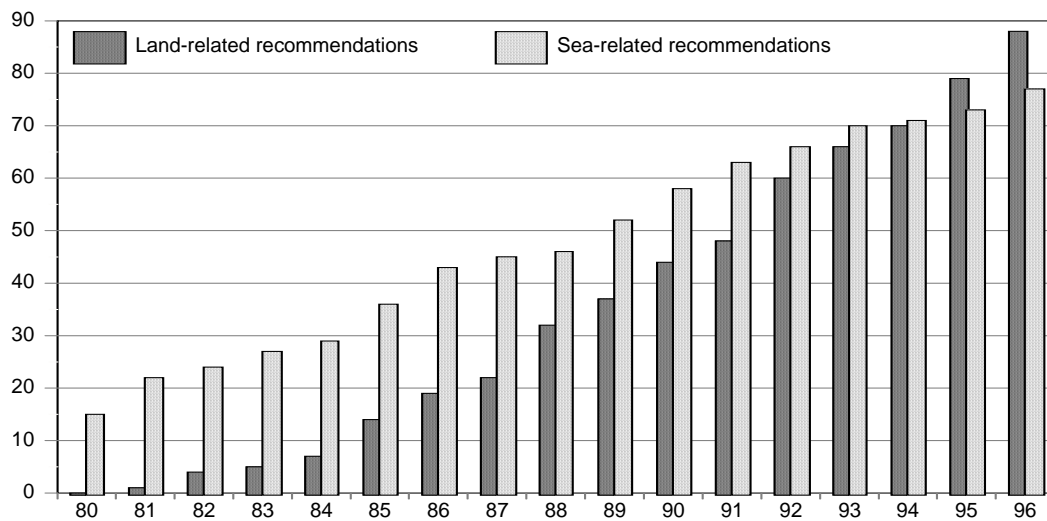


Figure 5.2 Focus of recommendations adopted by the Helsinki Commission, 1980-1996 (cumulative count). Source: Table 5.1.

the late 1980s that land-based recommendations began to catch up on those adopted on sea-based issues. And we must look to the mid-1990s before recommendations on land-based issues prevailed, suggesting that the Helsinki Commission now truly had expanded its focus to those land-based issues, which already at the time of the preparatory meeting in 1973 were estimated to account for some 80 per cent of the marine pollution (Section 3.3). This trend becomes particularly apparent if the recommendations on respectively land and sea-based sources of marine pollution are summed up over the years (Figure 5.2).⁶

An important aim of Chapter 3 was to show that the spatial scope of early Baltic Sea environmental cooperation was not a given, but was ‘negotiated’ politically. In Chapter 4 this concrete development was conceptualised as process of scaling that may lead to an environmental enclosure – a temporarily fixed scale, which situates an environmental problem as a geographical object for policy. Formally, the 1974 Helsinki Convention concerned all sources of marine pollution, whether on land or at sea. Yet the provisions of the convention suggested that it in fact was confined to issues in the extraterritorial waters of the Baltic Sea. And as indicated by the organisation and particularly the recommendations adopted by the Helsinki Commission until the mid-1980s, the practices of the Baltic Sea states consolidated the limited environmental enclosure implied by the convention. Formally suggested and practically consolidated, substantial cooperation was enclosed to the extraterritorial waters of the Baltic Sea and concerned with sea-based sources of pollution.

6. Most recommendations are easily classified as concerning issues either on land or at sea. But the classification of some recommendations requires a measure of interpretation. The category ‘sea’ includes measures relating to vessels and (oil) pollution at sea, activities on the seabed and dumping, and promotion of shore facilities for residues and wastes from ships. The category ‘land’ includes measures on land and in the coastal waters, scientific cooperation, general issues (e.g. definition of ‘best available technology’), and recommendations concerning issues on land as well as at sea.

According to Ehlers, who was and is active in the Helsinki Commission, the early focus on sea-based issues (and scientific cooperation) was because ‘these were the fields in which most work had already been done nationally and internationally to ensure rapid results’ (Ehlers 1993: 192). This is undoubtedly part of the explanation. We have previously seen that most intergovernmental environmental agreements in the 1970s and 80s concerned marine issues (Section 3.2). Yet it was also noted that this focus – in significant part, at least – related to the fact that steps in relation to ship-based sources of pollution did not encroach on conventional notions of sovereignty to the same extent as action on land-based issues. This was also an important reason for the limited spatial scale of the 1974 Helsinki Convention and the early practices of the Helsinki Commission. Thus, Kindler and Lintner (1993: 11) are onto something when they observe:

Unfortunately, until the relatively recent political changes in the Baltic region, the activities of HELCOM concentrated on the open sea. As long as the coastline was shared by countries belonging to different military blocs, the coastal waters were largely inaccessible, and only extremely limited data on land-based pollution sources were available.

In a somewhat wider sense that just concerning conventional geopolitics, these ‘relatively recent political changes’, and in particular the re-scaling of Baltic Sea environmental cooperation they entailed, is the topic of the next section.

5.2 The Helsinki Commission Goes Ashore

The political geography of the Baltic Sea area was dramatically transformed by the 1989 fall of the Berlin Wall and the subsequent breakup of the Soviet Union in 1991. One state was thus eliminated from the territorial equation with the 1990 unification of the German republics, while the independence of Estonia, Latvia and Lithuania added three states. And these territorial changes were but a few of the developments that marked the rapid demise of the cold war as the master narrative of world politics. The form and meaning attached to the ‘political spaces’ in the Baltic Sea area were in other words recast. But this is only one side in the spatial tension that make up the notion of environmental interdependence (Chapter 1). In respect to the Baltic Sea as an ‘environmental space’, the ‘walls’ had already begun to crumble before the geopolitical milestones of 1989 and 1991. In large part, this was due to the happy convergence of two ostensibly independent developments.

First, and most conspicuously, the Soviet Union began during the late 1980s to relax its interpretation of sovereignty in intergovernmental cooperation. We have previously seen that a weighty reason for the restricted spatial scope of the 1974 Helsinki Convention related to the strict interpretation of formal sovereignty by the Soviet Union (Section 3.4). But this policy was radically changed when Gorbachev in 1985 was elevated to the post of Secretary General. According to Darst (2001), the

regime of Gorbachev viewed environmental cooperation as one way among others to moderate the hostility of the cold war and to project a more favourable image of the Soviet Union abroad. Also, Darst contends, this change in environmental policy was fuelled by a wish to secure 'western' cooperation on other issues of greater interest to the new Soviet regime. Darst argues, in other words, that the Soviet Union under Gorbachev continued the practice of 'instrumental manipulation' of environmental issues for other ends, which the Brezhnev regime had initiated in the late 1960s (Section 3.2). In its new form, however, this policy was accompanied by a substantial redirection of resources, and was – even before the Chernobyl disaster – guided by more genuine environmental concerns. Also, during the terminal years of the Soviet Union, the 'environment' emerged as an issue on which it was reasonably permitted to advance political criticism. Much of the opposition movement in the Baltic republics was thus organised around environmental themes. In any case, from about 1986, the scope and stringency of Baltic Sea environmental cooperation increased substantially, 'not least because the USSR, under Mikhail Gorbachev, agreed that the commitments could be expanded to cover territorial seas, internal waters, and land-based sources of pollution, as well as the open sea' (Greene 1998: 180).

Second, this opening by the Soviet Union coincided with a renewed 'western' concern for environmental matters during the second half of the 1980s; indeed, if we are to believe Darst's (2001) somewhat conspiratorial analysis, the Soviet Union (and later the Soviet successor states) seized this concern to advance other goals. Official environmental politics has a comparatively long history in the 'western' Baltic Sea states, noticeably in the Nordic ones where traditions for negotiated compromises and corporation quite early were extended to involve at least established environmental organisations (Andersen 1997; Joas 1997; Kronsell 1997). Likewise, if more domestically contested and at times reluctantly, the FRG began in the late 1960s to address environmental issues (Pehle 1997). From an early stage, such environmental concern also took an international dimension, witnessed by the Swedish hosting of the 1972 United Nations Conference on the Human Environment (UNCHE) and, of course, the particularly Finnish push for the Helsinki Convention. Yet, in the late 1980s, governmental and nongovernmental attention to environmental issues received a boost, not least from the publication of the Brundtland Report (WCED 1987), which made the notion of 'sustainable development' a household name. If anything has become an 'essentially contested concept' in recent environmental debates, surely it must be this notion. Least controversial is arguably the Brundtland Commission's argument that 'sustainable development' is development that meets the needs of the present without compromising the ability of future generations to meet their own needs; among the hotly disputed issues is the view that environmental care is compatible with economic growth. Controversies aside, the Brundtland Report became a rallying point for much governmental as well as nongovernmental activity, notably in the Nordic countries. Moreover, if not prominent in the Brundtland Report but certainly in several declarations and treaties in its wake, the late 1980s involved at least a rhetorical move from

reactive to active environmental policies. Most conspicuously, this was expressed in the accedence of the so-called 'precautionary principle'. In the words of Hajer:

The precautionary principle is of course not a natural scientific concept. It is a policy principle which was introduced as the antithesis of its predecessor: remedial environmental politics. It meant to illuminate the credibility of the idea of anticipatory policy and to create new coalitions in pollution politics. In that context the precautionary principle holds that policy-makers will sometimes have to decide on action even if there is no scientific evidence of a causal link. (Hajer 1995: 67)

In Baltic Sea environmental cooperation, these wider environmental-political changes influenced what Hjorth (1992) identifies as a shift from a primarily 'scientific-technological' strategy to a policy-led 'political programme' strategy.

Declarations of Change

These developments emerged and merged in Baltic Sea environmental cooperation from round about 1988. We have previously noted that the Helsinki Commission mostly worked through the adoption of recommendations. But these usually practical steps were periodically accompanied by wider policy oriented statements adopted at meetings with ministerial participation. We shall in the respect look at two such policy statements, the 1988 Declaration on the Protection of the Marine Environment of the Baltic Sea Area and the 1990 Baltic Sea Declaration, which suggested the new course of Baltic Sea environmental cooperation in the late 1980s.

The annual meetings of the Helsinki Commission had in 1980 and 1984 been convened with participation from the ministers responsible for the environmental protection of the Baltic Sea. This had in 1984 resulted in a medium-term plan to ensure better organisation of the work for the next four years, which essentially enshrined the cautionary approach that characterised the early years of Baltic Sea environmental cooperation.⁷ Real changes first surfaced at the 1988 ministerial meeting. As one expects on such occasions, the ministers all had something positive to say about the cooperative venture. But particularly the 'western' ministers also questioned the actual environmental results and called for a change in the policy of the commission. This was very evident in the statement by the Swedish minister.⁸

Save the obligatory courtesies, the Swedish minister opened her statement with a direct reference to the Brundtland Commission, which she found to have 'convincingly shown how important it is to bring about a sustainable development. If such a concept is applied, we will save our environment and safeguard our valuable

7. 'Medium-term plan for the activities of the Helsinki Commission', HELCOM Resolution 5A, adopted in Helsinki, 14 March 1984. Reproduced in Helsinki Commission (1984). For a discussion of the 1984 ministerial meeting and the medium-term plan, see Hjorth (1992).

8. 'Statement by the Swedish minister of environment and energy, Mrs Brigitta Dahl, at the ninth meeting of the Helsinki Commission, February 15th, 1989', Helsinki Commission, Report of the Ninth Meeting, Helsinki, 15-19 February 1988, HELCOM 9/16, Annex 10.

resources'. But, she added, 'We have to face the fact that we are not pursuing a sustainable development in the Baltic Sea Area'. In significant part, this related to the geographical focus of the commission. For although the minister acknowledged the advances made on sea-based sources of pollution, she emphasised that 'it is of great importance to reach further agreements concerning the reduction of discharges from land-based sources'. The minister therefore considered it essential for the Helsinki Commission to set a limit value, and date to reach this limit, on discharges of harmful substances such as persistent organic compounds and nutrients from agriculture and urban centres. Considering the vulnerability of the Baltic Sea, the minister found that the commission in this respect at least should make the same binding commitments to reduce emission as had been achieved at the 1987 North Sea Conference: a reduction of discharges of certain toxic and persistent substances by 50 per cent before 1995. Moreover, this effort should follow the 'precautionary principle', a hallmark of new environmental concern in the late 1980s: 'Since the damage to the marine environment can be irreversible or remedial only in a long-term perspective,' the minister warned, 'the Contracting Parties must adopt a precautionary approach and not wait for full scientific proof of harmful effects before taking action to prevent and abate pollution'.

If the statement by the Swedish minister exemplified the renewed environmental commitment in the late 1980s, the statement by the Soviet minister suggested the new geopolitical context of Baltic Sea environmental cooperation. Like his Swedish counterpart, if more cautiously worded, so recognised the Soviet minister that 'the state of the marine environment in some regions remains tense and requires urgent protecting measures on national and international levels'.⁹ But on the international level, the active Soviet steps to achieve this end were in the minister's statement confined to some cursory references to calls for international environmental cooperation by Gorbachev and prime minister Ryzhkov. The bulk of the statement concerned the domestic steps taken by the Soviet Union, and unlike the usual practice, this was not merely to applaud Soviet successes. Rather, with an implicit reference to Gorbachev's policy of *perestroika*, the minister declared:

The launched fundamental economic reform has shown the imperfection of the existing system of environmental management with environmental protection functions scattered among numerous ministries. Such system hardly meets modern requirements of economy and grew into a serious negative factor restricting the intensification of production against the background of rising interdependence between the environment and the economic progress.

From this surprising show of Soviet self-critique, the minister went on to a lengthy description of the establishment and aim of a new State Committee for Environmental Protection. First towards the end of his statement did the minister return to the

9. 'Statement by the head of the USSR delegation, Mr Boris G. Shtepa, deputy minister of land reclamation and water management', Helsinki Commission, Report of the Ninth Meeting, Helsinki, 15-20 February 1988, HELCOM 9/16, Annex 11.

question of the Baltic Sea, but only to declare that the Soviet government fully supported the prepared draft declaration as ‘a new stage in the Commission’s activity’ and welcomed ‘the growing activity of the Helsinki Commission’.

In short, the Soviet minister simply went along with the potentially ambitious agenda vocalised by his Swedish colleague. And this was essentially the line of the 1988 ministerial declaration, which, with a bow to the Brundtlandian notion of inter-generational equity, acknowledged ‘the need to protect and preserve for present and future generations this most important marine ecosystem’.¹⁰ Also, the precautionary principle was thus inscribed into the preamble in almost exactly the words used by the Swedish minister, and the parties to the declaration stated their determination to make ‘further provisions for reducing discharges from point sources, such as industrial installations and urban wastewater treatment plants’ and ‘noted that actions concerning non-point sources will also be needed’. The latter should probably in particular be read as a reference to discharges from agricultural sources. In any case, these statements constituted a clear commitment to address land-based sources of pollution. Moreover, the declaration recognised:

In order to fulfill these objectives current and new efforts on reduction of the load of pollution should aim at a substantive reduction of the substances most harmful to the ecosystem of the Baltic Sea, especially of

- heavy metals and toxic or persistent organic substances, and
- nutrients

for example in the order of 50 per cent of the total discharge of each of them, as soon as possible but not later than 1995.

The qualification ‘for example’ was a potentially troubling feature of the declaration, of course, which was not helped by the fact that the declaration did not mention a reference level or year from which the reduction should be made. Still, the declaration was a first indication of the conspicuous changes in the policy of Baltic Sea environmental cooperation during the late 1980s, which from the perspective of this study also heralded a notable shift in the geographical focus. If the practices of Baltic Sea environmental cooperation during the first extended decade had consolidated the limited environmental enclosure of the high seas implied in the 1974 convention, the 1988 declaration suggested that practices were about to trespass on this enclosure. Slowly but surely, environmental cooperative began to creep ashore, and this process of amphibian metamorphosis was accelerated by the Baltic Sea Declaration adopted at the 1990 Ronneby conference.

Strictly speaking, the Ronneby conference took place outside the framework of the Helsinki Commission. Spurred by the critical political changes underway in the Soviet Union and Eastern Europe, the meeting of ‘Heads of Governments and High Political Representatives’ was thus convened on the initiative of the Swedish and

10. ‘Declaration on the Protection of the Marine Environment of the Baltic Sea Area’, adopted in Helsinki, 15 March 1988. Reproduced as Annex 3 in Helsinki Commission (1994b).

Polish prime ministers. And apart from the member states of the Helsinki Commission, the 1990 declaration was made on the behalf of Norway, the Czech and Slovak Federal Republic, and the Commission of the European Community. The geopolitical undertone was also reflected in the preamble of the declaration, which welcomed 'the new climate of understanding and cooperation between the States in the Baltic Sea area, which will make resources available for the protection of the Baltic Sea environment, inter alia, through the reduced need for armaments expenditures'.¹¹ Also, the preamble stated the signatories conviction that such cooperation could contribute to the process of the Conference on Security and Cooperation in Europe (CSCE).

These introductory references to the wider geopolitical setting were well in line with the rituals of Baltic Sea environmental cooperation, which from the start was embroiled in cold war *détente* and the CSCE process (Chapter 3); indeed, as Ehlers notes, 'It is no accident that the work of the Helsinki Commission was held to be an exemplary case of the CSCE efforts which are also equally associated with Helsinki' (Ehlers 1993: 192). Yet, if Baltic Sea environmental cooperation at times seemed as a means to achieve wider geopolitical ends during the early phase, the geopolitical changes were now seized for environmental ends. This was at least the line of an internal Danish note on the Ronneby Conference:

The purpose of the conference was to utilise the improved political climate between east and west to strengthen the environmental cooperation on the Baltic Sea. [...] The seven Baltic Sea countries work continuously to develop and intensify cooperation in the so-called Helsinki Commission, but the work has hitherto been hampered by the difficulties of controlling whether the adopted recommendations are observed in practice in all the Baltic Sea countries. In addition, the almost crisis-like state of the marine environment in some parts of the Baltic Sea has entailed that particularly the Nordic countries have felt it necessary to address the environmental situation of the Baltic Sea on the political level.¹²

Geopolitical changes were in this way an important context for the 1990 Ronneby conference, and Stålvant (1993) is probably not wide off the mark when he notes that environmental policy provided high-level politicians an arena to address wider societal goals in the transition process. Yet the declaration it produced was firmly set on the environmental issues in the Baltic Sea area. In part, this involved a reaffirmation and in some case strengthening of the 1988 declaration. The notion of 'sustainable development' and the related pledge to protect the Baltic Sea for present and future generations found way to the declaration, for example, and so did the 'precautionary principle'. Also, the declaration reaffirmed the commitment to reduce emissions of harmful substances in the order of 50 per cent, this time without the qualification 'for example' and with the specification of 1987-1995 as the period for the reduction.

11. 'Baltic Sea Declaration', adopted in Ronneby, 2-3 September 1990. Reproduced as Annex 4 in Helsinki Commission (1994b).

12. 'Notat vedrørende Østersø-konferencen i Ronneby, Sverige', Danish Environmental Protection Agency, note of 13. September 1990 (Archives of the Danish EPA). My translation. As this note was compiled within the civil service, the notion 'political level' implies the involvement of ministers.

A significant novelty of the declaration was the emphasis on financial matters; in the words of the preamble, the parties welcomed ‘the substantial financial support for the protection of the environment of the Baltic Sea area which is already under way or which may be expected from bilateral agreements, the programmes of the EC and the activities of all relevant international financial institutions’. Who was to benefit from this support was a mute point. Yet, considering the winds of change sweeping the Baltic Sea, the direction was plain: as an internal Danish summary of the preparations of the declarations had it, ‘The Eastern countries emphasised again and again the need for transfer of resources and technology to live up to the [1988] ministerial declaration’s demands on reduction goals for pollution emissions, use of cleaner technology, etc.’.¹³

The need for transfers of financial resources and technology to the ‘east’ did become an urgent concern, not least because the major step of the 1990 declaration was the launching of an ambitious programme for the Baltic Sea environment. In the first substantial paragraph of the actual declaration, the parties thus declared their firm determination to ‘Urgently prepare a joint comprehensive programme for decisive reduction of emissions in order to restore the Baltic Sea to a sound ecological balance’. This programme was to be based on concrete national plans that should ‘contain relevant decisions, programmes and regulations for the reduction of polluting substances (especially inputs from agriculture, industry, sewage treatment plants and waste) taking into consideration the quantities of major direct and indirect inputs’. The focus was, in other words, firmly set on land-based sources of marine pollution. Also, the declaration called for the immediate establishment of an *ad hoc* high-level task force to ‘coordinate and supplement the analysis for different parts of the Baltic Sea and to prepare the joint comprehensive programme’. The institutional standing of the task force was apparently a point of some disagreement. Sweden should thus have favoured the task force to be an independent institution, while Denmark and Finland insisted that it should operate within the framework of the Helsinki Commission.¹⁴ The latter view prevailed, as the declaration determined that the task force should be set up ‘within the Helsinki Commission’ and that the programme was to be decided upon at ministerial level ‘within the framework of the Helsinki Commission’.

The Joint Comprehensive Environmental Action Programme

The Baltic Sea Joint Comprehensive Environmental Action Programme (JCP) was developed by the *ad hoc* high-level task force during 1991 and 1992, and a preliminary version was in 1992 approved at the diplomatic conference, where some

13. ‘2. Forberedende møde vedrørende Østersømiljøkonferencen i Gdansk 20.-21- juni 1990’, Danish Ministry of Foreign Affairs, report of 25 June 1990 (Archives of the Danish EPA). My translation.

14. ‘Notat vedrørende Østersø-konferencen i Ronneby, Sverige’, Danish Environmental Protection Agency, note of 13. September 1990 (Archives of the Danish EPA).

participants also signed the revised Helsinki Convention. On the same occasion, the parties to the JCP established a Programme Implementation Task Force (PITF), which 'within the framework of the Helsinki Commission' should 'finalize the Programme, co-ordinate, facilitate and monitor Programme implementation, and initiate periodic updating of the Programme'.¹⁵ The final programme was ready and approved the following year (Helsinki Commission 1993; Kindler and Lintner 1993).

The JCP was in this way institutionalised within the framework of the Helsinki Commission. Yet, as already begun at the 1990 Ronneby conference, the preparation and implementation of the programme went beyond the group of signatories to the Helsinki Convention. In addition to the contracting parties (Denmark, Estonia, Finland, Germany, Lithuania, Poland, Russia and Sweden), the preparatory task force included representatives from the Czech and Slovak Federal Republic, Latvia, Norway and the Commission of the EC. (Latvia and the EC subsequently became parties to the convention.) With the addition of Belarus and Ukraine, all these states were also represented in the PITF. As a sign of changes underway in Baltic Sea environmental cooperation, however, the preparatory task force and the PITF also included four multilateral financial institutions: the European Bank for Reconstruction and Development, the European Investment Bank, the Nordic Investment Bank, and the World Bank. As we shall see shortly, the participation of these institutions was central to the implementation of the JCP. But the institutions also acted as executive agencies in the coordination of eight major pre-feasibility studies – all focussed on areas in those countries, which during this period emerged as 'transitional economies'. Several other organisations acted as observers, and the most conspicuous development was in this respect the involvement of three nongovernmental organisations, the Coalition Clean Baltic (CCB), Greenpeace International, and the World Wide Fund for Nature (WWF). As we will see later in this chapter, the involvement of activist organisations like that in the work of the Helsinki Convention did not come easily. Yet, the nongovernmental organisations played an active role in the preparation and implementation of the JCP. Most remarkably, the CCB and the WWF acted as 'lead parties' in the implementation, which is to say that they assumed the responsibility to coordinate activities on key elements of the programme.

To anticipate the next chapter, we might say that the inclusion of nonterritorial actors like multilateral financial institutions and nongovernmental organisations marked a step of 'social inclusion' in the work of the Helsinki Commission. But in a very tangible way, the JCP also unsettled the environmental space of the commission; in the words of the 1992 Baltic Sea Environmental Declaration that launched the JCP, the parties agreed that they should 'TAKE ACTION to promote implementation of the Programme in the entire catchment area of the Baltic Sea' (*supra* note 15). In a sense, the JCP was all about breaking the environmental enclosure that so far had governed

15. 'Baltic Sea environmental declaration, 1992' and Resolution 5, 'Establishment of a Programme Implementation Task Force within the frame work of the Helsinki Commission', adopted in Helsinki, 9 April 1992. Reproduced as Annex 5 in Helsinki Commission (1994b).

Table 5.2 Key elements and estimated costs of the Baltic Sea JCP (million ECU).

	1993-1997	1998-2012	Total
1 Policies, laws and regulations	5	5	10
2 Institutional strengthening and human resources dev.	70	140	210
3a Investment activities, point source pollution:			
– Immediate support and warning systems	50	0	50
– Municipal wastewater treatment	1.000	2.000	3.000
– Municipal and industrial wastewater treatment	1.600	4.000	5.600
– Pulp and paper industry wastewater treatment	400	1.000	1.400
– Environmental control at other industries	300	1.000	1.300
– Solid and hazardous waste management	200	800	1.000
– Air quality management	460	1.200	1.660
3b Investment activities, non-point source pollution	800	2.700	3.500
4 Management of coastal lagoons and wetlands	100	120	220
5 Applied research	10	20	30
6 Public awareness and environmental education	5	15	20
<i>Total</i>	<i>5.000</i>	<i>13.000</i>	<i>18.000</i>

Sources: Helsinki Commission (1993)

Baltic Sea environmental cooperation, and this process of re-scaling the cooperative venture becomes evident if we look at the key elements and budgeting of the JCP.

Split into six key elements, the JCP was planned to run for twenty years, which sensibly were divided into a first phases of five years and a second phase of fifteen years (Table 5.2). The total cost of the programme was estimated to be a staggering 18 billion ECU. Yet the JCP was not endowed with a financial mechanism of its own. Rather, the individual government had to commit the resources to finance activities within their territory, or, when such funds were not sufficient, rely on contributions from donors. This explains the involvement of multilateral financial institutions to bolster bilateral contributions from ‘western’ governments, for it was from the outset recognised that the states embroiled in ‘economic transition’ could not shoulder the burden on their own; in the words of the 1993 high level conference to mobilise resources, the parties to the JCP were ‘conscious’ of ‘the present difficult position of the countries with formerly centrally planned economies which requires participation and support from the bilateral donors and international financial institutions’.¹⁶

Still, the financing of the JCP became an obstacle (Auer and Nilenders 2001). For our purpose, however, the budgeting of the estimated costs between the key elements of the programme is telling. The vast proportion of the estimated costs were thus allocated to investment activities, primarily for treatment of ‘point source pollution’ from municipal and industrial wastewater, secondarily for abatement of ‘non-point sources pollution’ from agricultural and rural activities (Table 5.2). The financial

16. ‘Declaration on Resource Mobilization for the Baltic Sea Joint Comprehensive Environmental Action Programme, 1993 (Gdansk Declaration)’, adopted in Gdansk, 24-25 March 1993. Reproduced as Annex 6 in Helsinki Commission (1994b).



Figure 5.3 *The Helsinki Commission goes ashore: catchment area and 'hot spots' (numbered). Source: Helsinki Commission (1993).*

emphasis was, in other words, on distinctly land-based sources of marine pollution. This points to the significant fact that the JCP identified 132 so-called 'hot spots' for environmental cleanup and restoration. Ninety-eight of these were recognised as 'key' hot spots, and 47 of them were furthermore identified as 'priority' hot spots. That all 98 key hot spots were located in the 'transitional economies' was suggestive, of course. In the perspective of this study, however, it is particularly significant that many hot spots were located far ashore, not only in the states bordering the Baltic Sea, but also in states connected to the Baltic Sea by its catchment area (Figure 5.3). Thus, with the JCP the catchment area for the first time emerges as a meaningful representation of the environmental space of Baltic Sea environmental cooperation. In fact, the programme document of the JCP is to the best of my knowledge the first

time the image of the catchment area is used in an official publication by the Helsinki Commission. Since then, however, the image of the catchment area has become the standard representation of environmental interdependence in the Baltic Sea area.

Assessments of the first years of the JCP vary. Ringius finds, for example, that 'the action plan is the first significant attempt to develop a comprehensive approach for restoration of the Baltic Sea' (Ringius 1996: 30). And according to Greene, the programme was by 1996 'widely regarded as an effective programme: it had helped to set priorities and mobilize national and international funding for many investment projects to reduce pollution from listed hot spots' (Greene 1998: 192). Auer and Nilenders (2001) are more cautious when they conclude that the first phase of the JCP failed to meet several pollution-abatement and investment targets specified by the programme in 1992. For those hot spots where data are available, the reduction of nutrients, phosphorus and particular nitrogen was thus significantly lower than the targets specified in the original programme. And of the investment goal of five billion ECU for the first phase, only a nominal sum of 1.59 billion ECU was allocated (1998 included). Still, the first phase in the JCP was in Auer and Nilenders' analysis a 'qualified success' as the programme reaped substantial results at the subregional levels, particularly in the Nordic countries, Germany and the comparatively wealthy Estonia. In any case, they find that 'The most significant achievements of the JCP do not include the direct assurance of environmental cleanup. Rather, the JCP advances other steps in the policy process that abet cleanup' (Auer and Nilenders 2001: 898).

Whatever the merits and shortcomings of the programme, the significance of the JCP is for us that it marked the point when the practices of the Helsinki Commission broke the limited environmental enclosure of the high seas and truly 'went ashore'. It is in this respect a small but telling detail that the preamble to the first draft of the Baltic Sea Convention, which was to set in motion the JCP, word-by-word reaffirmed Principle 21 of the Stockholm Principles (Section 1.3):

States have, in accordance with the Charter of the United Nations and the applicable principles of international law, the sovereign right to exploit their own resources pursuant to their environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.¹⁷

This affirmation of sovereignty, and the spatial sovereignty-environment tension, had vanished by time the parties drew up the second draft proposal,¹⁸ and did not reappear in the final declaration (*supra* note 11). This did not imply that sovereignty disappeared from Baltic Sea environmental cooperation. The JCP was thus based on actions by the individual governments, although with a heavy involvement of bilateral and multilateral donors in the 'eastern' states. Also, as we will see shortly, the revised Helsinki Convention that accompanied the programme reaffirmed the sovereignty of

17. 'Baltic Sea Declaration', draft proposal of 27 April 1990 (Archives of the Danish EPA).

18. 'Baltic Sea Declaration', draft proposal of 21 June 1990 (Archives of the Danish EPA).

the contracting states. But sovereignty was clearly on the decline as a major obstacle for the Helsinki Commission to address issues of land-based pollution.

From about 1988, this widening focus of the Helsinki Commission was reflected in the mounting number of recommendations on land-based sources of pollution (Figure 5.2). And even the organisational structure of the commission began to mirror the new focus. The Scientific-Technological Committee was thus in 1990 split in two, the Environment Committee and the Technological Committee (Figure 5.1). The Environment Committee continued the joint monitoring and assessment activities, while the Technological Committee took on the task of 'elaborating the adequate preventive and curative measures against land-based pollution' (Helsinki Commission 1994b: 41). The new organisational structure implied, in other words, that 'land' now was represented by a separate committee. And the organisational balance between land and sea was further equalised when the Programme Implementation Task Force of the JCP in 1992 was given committee status. But the most conspicuous indication of the expanded geographical focus was arguably the 'hot spots' identified in the JCP, which made the image of the catchment area a meaningful representation of the environmental space of Baltic Sea environmental cooperation.

5.3 'The Baltic Sea – Our Common Sea'

In February 1990 the Helsinki Commission decided to initiate a full revision of the 1974 Helsinki Convention. In fact, this endeavour was part and parcel of the 'landing' of the commission, which had surfaced in the 1988 ministerial declaration and was given further momentum by the 1990 declaration and the preparation of the JCP in engendered. The practices of the commission were clearly running ahead of the formal provisions of the 1974 convention. The Finnish delegation to the commission had thus in 1989 asked for more binding decisions to improve the quality of the Baltic marine environment. To this end, the executive secretary prepared a document on how the article and annexes on land-based pollution in the 1974 convention could be amended to included more stringent and binding provisions. But he had in this respect found it natural to raise the question whether the time was ripe for a complete revision of the convention. This suggestion was seized by Sweden, which in 1990 submitted a proposal for a full revision of the convention.¹⁹

The commission decided to heed this suggestion and established an *ad hoc* group for revision of the Helsinki Convention, which should consider the necessary amendments to bring the convention in line with developments since 1974. First among the several issues the group in particular should consider was 'the need and possibilities

19. 'Introduction of more binding and stringent measures in the field of prevention and control by including further technical provisions in the Annexes to the Helsinki Convention' (submitted by the Executive Secretary), HELCOM 11/9e/1 of 4 December 1989; 'Swedish proposal to the Commission to initiate a full revision of the Convention on the Protection of the Marine Environment of the Baltic Sea Area' (Submitted by Sweden), HELCOM 11/9e/3 of 26 January 1990.

to introduce more legally binding technical provisions in the field of prevention and control relating to pollution from landbased [*sic*] sources'. Moreover, the group should consider 'the application area of the Convention and its possible enlargement to cover internal waters and the whole of the catchment area of the Baltic Sea'.²⁰

The revised Helsinki Convention was signed in April 1992, this time by Denmark, Finland and Sweden, a single Germany, Estonia, Latvia and Lithuania, the Russian Federation in place of the Soviet Union, and the EC.²¹ And the 1992 convention is in many respects the document the *ad hoc* group for revision had been asked to prepare. This involved several novelties, but we shall only address those elements that relate to the issues discussed in this chapter and the general perspective of this study (for a detailed analysis, see Ehlers 1993). Appropriately, if with a somewhat legalistic bend, we may start with Article 3 of the convention, which establishes the fundamental principles and obligations. The first paragraph reads:

The Contracting Parties shall individually or jointly take all appropriate legislative, administrative or other relevant measures to prevent and eliminate pollution in order to promote the ecological restoration of the Baltic Sea Area and the preservation of its ecological balance.²²

The structure of this article is not that different for the corresponding article in the 1974 convention (Section 3.4), but the wording is suggestive. The commitment to 'eliminate pollution' is thus stronger than the previous obligation to 'abate pollution'. Similarly, the commitment to 'promote ecological restoration of the Baltic Sea Area and the preservation of its ecological balance' is more demanding than the 1974 obligation merely to 'protect and enhance the marine environment'. These changes point to the influence of the more activist environmental policies of the late 1980s. This feature is underlined by the inclusion of the 'precautionary principle' – and its more specific derivative principles of 'best environmental practice' and 'best available technology' – among the fundamental principles and obligations of the 1992 convention. (For an analysis of these environmental principles and their application in the Baltic Sea area, see Mickwitz 1998.) Also, we can take the references to 'ecology' as an indication of how the ecological world-view, which was emerging in the 'overall' approach of the 1974 convention, has become manifest; it is probably no coincident that the convention several times refers to the Baltic Sea in terms of 'ecosystems'.

20. 'Tasks of the HELCOM *ad hoc* Group for Revision of the Convention', Helsinki Commission, Report of the Eleventh Meeting, Helsinki, 13-16 February 1990, HELCOM 11/14, Annex 28.

21. Due to its internal procedures, the EC first signed the convention on 25 September 1992. Estonia, Latvia, Lithuania and Russia all suffered severe financial problems during the early 1990s and had difficulties paying their share of the commission's budget. Partly for this reason, Latvia delayed its full accession to the Helsinki Convention until 1993.

22. 'Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1992', signed in Helsinki, 9 April 1992 (24 September 1992 by the European Economic Community). Reproduced as Annex 2 in Helsinki Commission (1994b). Also available on: www.helcom.fi.

As one should expect, several provisions of the 1974 convention are improved in the revised convention. The general prohibition of dumping is thus extended to include incineration at sea, and the principles of cooperation on the combatting of pollution incidents at sea are tightened. Also, as the first international convention, the 1992 convention establishes environmental standards for offshore activities. The changes to the originally extensive provisions on the prevention of pollution from ships, on the other hand, are mostly editorial. This reflects the fact that the MARPOL convention on pollution from ships has entered into force since the first convention.

As a novelty, the convention includes an article on nature conservation and biodiversity. This expansion was originally proposed by the World Wide Fund for Nature, and while the governments generally viewed the issue with sympathy, several of them had initially found that nature conservation should be addressed in a separate convention.²³ This may explain why the article is very short and without concrete substance, but the inclusion of an article proposed by a nongovernmental organisation is a sign of the changing atmosphere of Baltic Sea environmental cooperation. Another sign is in this respect that convention also includes articles, which require the contracting parties to report regularly on the implementation of the convention, exchange information, and ensure that information is made available to the public.

From our perspective, however, the provisions on pollution from land-based sources are particularly interesting. We have previously seen that such issues were accorded a very short and general treatment in the 1974 convention (Section 3.4). In contrast, the annex on land-based pollution of the revised convention is significantly expanded. Among other things, it includes specific requirements on the treatment of municipal and industrial waste water, and establishes principles for the issuing of permits when harmful substances from point sources are to be introduced into the Baltic Sea. Also, the annex stipulates that 'Pollution from diffuse sources, including agriculture, shall be eliminated by promotion and implementing Best Environmental Practice'. Moreover, and for us significantly, the first regulation of the annex states that the contracting parties shall apply its criteria and measures 'to the whole catchment area'. The catchment area is not specifically mentioned in Article 1 on the area of the convention. But the article includes a small but significant change, which symbolises the formal recognition of the re-scaling of Baltic Sea environmental cooperation: as a complete reversal of the 1974 convention, the internal waters – the in both environmental and sovereign terms tender zones between land and sea – is now explicitly included in the convention area.

Like its predecessor, the 1992 Helsinki Convention is essentially a framework convention, which is to say that it establishes a set of general principles and guidelines for the cooperative venture. The annexes include detailed regulations on some issues, but substantive steps are otherwise still to be taken through the adoption of

23. Helsinki Commission, Report of the Twelfth Meeting, HELCOM 12/18 of 22 February 1991; '12. Møde i Kommissionen til beskyttelse af havmiljøet i Østersøområdet (Helsingforskommissionen) Helsingfors, 19-22 februar 1991', Danish EPA, report of 4 March 1991 (Archives of the Danish EPA).

recommendations, which from the point of view of international law does not have the binding nature of a formally ratified convention. In fact, the lack of effect-related and legally binding criteria motivates Ebbesson (1996) to conclude that the 1992 convention in a sense represents a ‘stand-still’ rather than a ‘transition’ in Baltic Sea environmental cooperation. Similarly, Ehlers (1993) is critical of the limited number of bans and restrictions in the convention, conspicuously in relation to ‘land-based inputs – by far the largest source of pollution’ (212). He also notes that the effectiveness of the Helsinki Commission ‘would doubtless have increased had it been given powers of supervision and control, but this still appears to be incompatible with member states’ concepts of sovereignty’ (213); indeed, Article 4(2) still states that ‘Without prejudice to its sovereignty’ the parties shall implement the provisions of the convention in their territorial and internal waters through ‘national authorities’. But Ehlers’ overall conclusion is optimistic:

The 1992 Helsinki Convention in many respects contains significant improvements compared with its 1974 predecessor. Account is taken on a large scale of the findings and experiences of the Helsinki Commission as well as of new ecopolitical insights gained since then, thereby removing the original’s weak points. Such is the case with *the inclusion of internal waters and the extension of preventive measures to the whole of the catchment area*. (Ehlers 1993: 212, italics added)

The provisions of the 1992 Helsinki Convention may still in various respects be insufficient, but in the geographical terms of this study, the closing line of Ehlers’ conclusion hits the point. From the outset in the early 1970s, the environmental space for Baltic Sea environmental cooperation was not simply given by nature. Rather, at the intersection of physical and social influences, this space was produced through a political process of scaling. This process was temporarily halted by the 1974 Helsinki Convention, which formally enclosed Baltic Sea environmental cooperation at the scale of the high seas, and this environmental enclosure was subsequently consolidated by the early practices of the Helsinki Commission. From the late 1980s, however, the practices of the commission began to encroach on the formal enclosure stipulated by the 1974 convention. In effect, the commission engaged in an upscaling of the Baltic Sea as an environmental space, which eventually in the 1992 convention was formalised into a new environmental enclosure at the scale of the catchment area. Significantly, this re-scaling of Baltic Sea environmental cooperation included the important sources of land-based pollution. In spatial terms, at least, it was not just a Brundtlandian platitude when the Helsinki Commission (1994a) in a publication to mark its 20-years jubilee publication use the caption: ‘The Baltic Sea – our common sea’.

Breaking enclosure?

The environmental enclosure symbolised by the image of the catchment area may appear as a highly appropriate space for the Baltic Sea environmental cooperation.

And practices such as the implementation of the JCP in the years after the signing of the 1992 convention consolidated this enclosure. But the practices following 1992, and in some respect the convention itself, may also open vistas for yet another re-scaling of the cooperative venture. To round off this chapter, we shall therefore take a brief look at some directions a re-scaling of Baltic Sea environmental politics may take. We can in this respect begin with an issue directly related to the previous section – the inclusion of the EC in the 1992 Helsinki Convention.

As previously noted, the EC had already in 1977 expressed its interest to join the Helsinki Convention (Section 5.1). Yet, if for no other reason, an accession was first possible after the Soviet Union in 1987 recognised the EC officially. The EC could thus in 1989 seek, and was in 1990 apparently without opposition granted observer status in the Helsinki Commission. This implied that the EC could participate in the decision-making process of the commission and its subsidiary bodies, could submit proposals, but could not vote. With the 1992 revision, however, the EC became a party to the Helsinki Convention. According to Article 35(4),

The European Economic Community and any other economic integration organization which becomes a Contracting Party to this Convention shall in matters within their competence, on their own behalf, exercise the rights and fulfill the responsibilities this Convention attributes to their member states. In such cases, the member states of these organizations shall not be entitled to exercise such rights individually.

The EC can, in other words, act on the behalf of the EC members in the Helsinki Commission. Also, the convention entitles the EC to vote with a number of votes equal the number of EC members, provided, of course, that the member states do not exercise their right to vote. Nevertheless, whether EC members of the Helsinki Commission choose to vote in their own capacity or not, they were and are bound by those EC/EU directives that might apply.

In 1992 only Denmark and the FRG were full members of both the EC and the Helsinki Commission. But the subsequent expansions of the EC in its new draping of the EU means that all members of the Helsinki Commission but Russia today also are members of the EU; in the forthright words of the recent Helsinki Commission chairperson, this 'means that HELCOM will lose its regulating power to a large extent'.²⁴ In one sense, the EU can thus be seen to have extended its political space to include the Baltic Sea area. This is an issue that has received considerable attention in the recent literature on the 'Baltic Sea Region' (Section 6.1). In another sense, however, one could also detect a (parallel) re-scaling of the environmental space of the Baltic Sea into the wider environmental space of the EU, or, if one wish, the other way around. And one could also find a rational, environmental argument for this. For the catchment area may be a fitting representation of scale for fluid pollution to the Baltic Sea, but it does not quite represent the scale of atmospheric pollution. A report

24. 'Statement by HELCOM Chair Inese Vaidere on the occasion of the Joint OSPAR/HELSOM Ministerial Meeting', press release of 23 June 2003, available from: www.helsom.fi.

by the Helsinki Commission estimates, for instance, that one third of the total lead pollution to the Baltic Sea derives from the atmosphere, and adds: 'In view of the prevailing wind directions, the inputs are likely to originate in the West European countries' (Helsinki Commission 2001a: 10). In the first place, these countries will be member states of the Helsinki Convention, but for the example of lead, the report points at Great Britain as an important source. Still, it should be admitted that the distinctions between 'environmental' and 'political' spaces are diffuse when it comes to Baltic Sea environmental cooperation in the wider context of the EU. But it is worth noting that the most recent ministerial declaration of the Helsinki Commission recognises that the work of the commission in the future should provide 'input to the regulatory process – pointing out the unique character of the Baltic Sea area [...] by contributing and co-operating to develop a European Marine Strategy'.²⁵ Also, the Helsinki Commission recently commissioned a study on the possibility of harmonising its recommendations with EU directives (Helsinki Commission 2001b).

Yet, if not altogether unrelated, the scaling of Baltic Sea environmental politics may also take other courses. Haas once argued that the conventions on respectively the North and Baltic seas constitute a single international institution, because

While discrete organizations have been established to deal with the problems of each sea, they are intricately interlocked. Organizational interlocking is based on the *ecological interdependence* among the seas, and on overlapping membership. Denmark, Germany, and Sweden are members of each commission. (Haas 1993: 134, italics added)

I was first a little surprised by this self-assured claim. Yet time has to some extent vindicated Haas' claim – at least if environmental politics is approached in scalar terms. Unlike the 'overall' approach adopted by the 1974 Helsinki Convention, co-operation on the marine environment of the North-East Atlantic (including the North Sea) was for long divided between two conventions: the 1972 Oslo Convention on ship-based pollution and the 1974 Paris Convention on land-based pollution. In 1992, however, the commissions of the two conventions decided to merge and could in 1998 – following the usual delay in the ratification process – take up work as the OSPAR Commission. The Helsinki Commission was thus presented with a single 'twin' commission covering the waters at the mouth of the Baltic Sea. And in 2003 the two commissions held a joint ministerial conference. While not representing a merger, this conference signals a 'high level' institutional rapprochement between the two commissions. This is further illustrated by the fact that the previous mentioned report on the possible harmonisation of Helsinki Commission recommendations and EC directives also addresses OSPAR decisions and recommendations. It is still too early to tell whether this institutional rapprochement also will entail a re-scaling of the environmental space of Baltic Sea environmental cooperation. The most tangible sign in this direction is the joint ministerial conference's stress on the need for joint action to protect threatened and declining species and habitats,

25. 'HELCOM Ministerial Declaration (HELCOM Bremen Declaration)' adopted in Bremen, 25 June 2003.

including a pledge 'to create by 2010 an ecologically coherent network of well managed marine protection areas covering the North-East Atlantic and the Baltic Sea'.²⁶ Yet, we have previously seen that the inclusion of the Kattegat in the environmental space of the Helsinki Commission was a political decision (Section 3.3). In some respects, this was an environmentally sensible decision, and this sensibility could well be extended to the sea beyond the Kattegat; that is, in the terms of Haas, if the relationship between the North and Baltic seas are seen as one of 'ecological interdependence'.

The developments outlined in the preceding paragraphs are still rather vague, if not outright confusing. Yet they may help to suggest that the 'environmental spaces' addressed in situations of environmental interdependence are not given or stable. Before leaving this matter, however, we shall call forth a particular vivid illustration of the scalar ambiguity of environmental spaces. But to reach this example we shall briefly return to the issue of observers to the Helsinki Commission. Although the only to rise into the rank of contracting parties, the EC was neither the first nor the last to be granted observer status in the Helsinki Commission. From its first days, the commission has thus granted observership to governments that are not parties to the convention (initially Czechoslovakia and Norway); intergovernmental organisations like the United Nations Environment Programme and the International Maritime Organization; various scientific institutions, for example the International Council for the Exploration of the Sea; and representatives from commissions regulating conventions related to the Baltic Sea. From the late 1980s, however, a new breed of actors entered the scene: nongovernmental international organisations. The involvement interest organisations like that in the essentially intergovernmental Helsinki Commission did not come easy. The commission had thus in 1988 postponed a decision on the granting of observer status to nongovernmental organisations, including a request for such status by Greenpeace International. The following year, however, the commission adopted a detailed set of guidelines on the granting of observer status to nongovernmental international organisations. Among other things, as a sign of some states' reluctance, such organisations could be granted observership if they had 'specialized technical, scientific or equivalent expertise pertinent to the objectives of the Convention'.²⁷ Still, Greenpeace was at the same meeting granted observer status, and was in 1991 followed by Coalition Clean Baltic (CCB) and the World Wide Fund for Nature.

If the inclusion of nongovernmental international organisations as observers represents an upscaling of Baltic Sea environmental cooperation, it must be in a somewhat metaphorical sense of 'scale'. But such organisations can produce very material scalar suggestions. A vivid example of this can be found in the Baltic Sea

26. 'Atlantic and Baltic joins forces', press release of 26 June 2003, available from: www.helcom.fi.

27. 'Guidelines on Granting Observer Status to Non-Governmental International Organizations to the Helsinki Commission', Helsinki Commission, Report of the Tenth Meeting, Helsinki 14-17 February 1989, HELCOM 10/14, Annex 16.

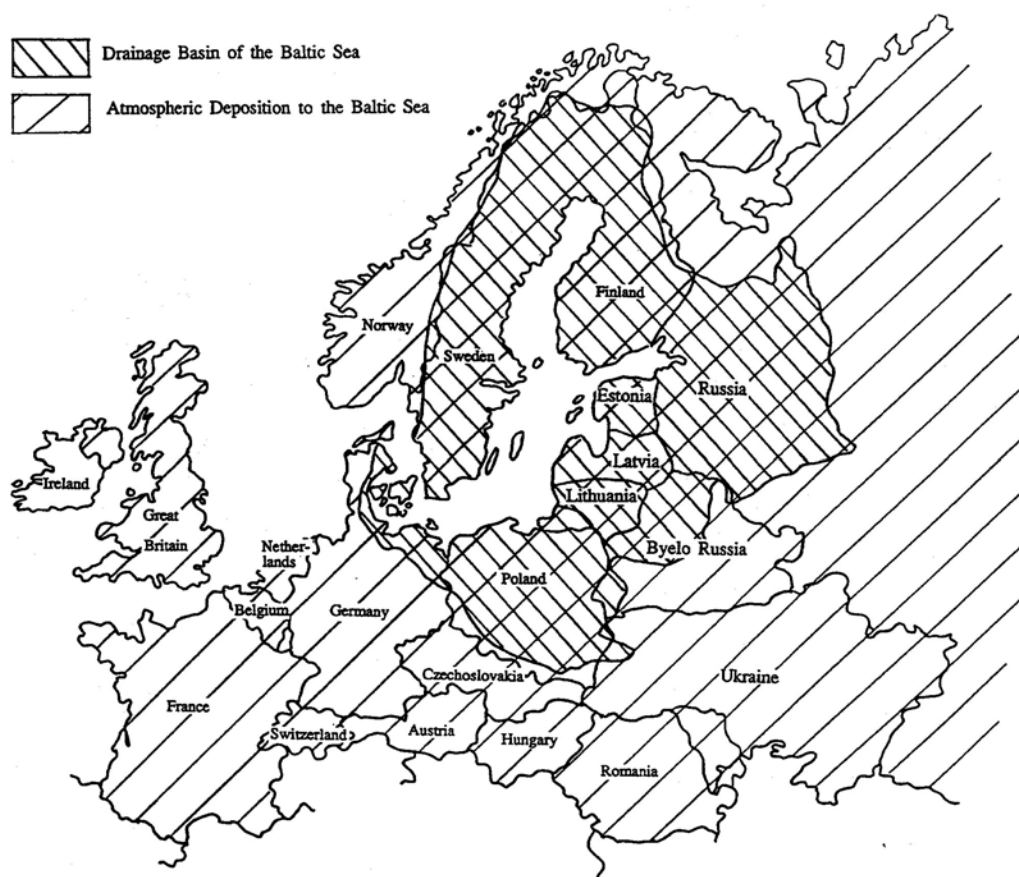


Figure 5.4 *Jumping scale? The 'air catchment area' of the Baltic Sea as represented by the Coalition Clean Baltic. Source: note 28.*

Action Plan, which the CCB prepared for the 1992 diplomatic conference that signed the revised Helsinki Convention. Here, the CCB took the image of the catchment area (or drainage basin) of the Baltic Sea, which also was presented in the Joint Comprehensive Environmental Action Plan at the conference. But they did not just superimpose the catchment area upon the state boundaries to illustrate the condition of environmental interdependence in the Baltic Sea. Rather, to show that pollution to the Baltic Sea not only consists of fluid runoffs, the CCB superimposed an 'Air Catchment Area' covering the entire European continent upon the Baltic Sea (Figure 5.4).²⁸ Tongue-in-cheek, maybe, but not without material foundations, the CCB in effect sought to 'jump' scale by taking the condition of environmental interdependence to wider geographical field. If someone wants a graphic illustration of the scalar ambiguity of environmental politics in the age of the ecological world-view, this image of catchment-area-upon-catchment-area must surely be a candidate.

28. Coalition Clean Baltic, *Baltic Sea Action Plan* (April 1992). The original caption to the figure reads: 'Drainage Basin and Air Catchment Area (concerning NO_x) of the Baltic Sea'.

Chapter Six

Regionalising Environmental Spaces – of Inclusion

The Baltic Sea, Westing argues, constitutes an ‘ecogeographical region, one that is divided among seven sovereign nations – Western, Eastern, and neutral – but that is at the same time unified by the Baltic Sea ecosystem’ (Westing 1989: xi). In the tropes of cold war politics, this is a neat articulation of the tension between environmental and political spaces, which combined in the notion of environmental interdependence is the conceptual starting point for this study. For this reason alone, the quotation from Westing seems an appropriate opening for this, the final chapter of the study. Yet it also provides the cue for the final part of the abstract discussion, and unlike the way a Westing quotation was used to open Chapter 4, his argument is this time not to be turned on its head. For a start, we shall only take note of Westing’s point that an area like the Baltic Sea can be seen as a ‘region’ that is ‘unified’ by an ecosystem. From a distinctly different position than that of Westing, the two sections of this chapter converge on these notions.

The first section is thus devoted to the suggestion that there is a regional dimension to large-scale environmental politics. More to the point, and as an extension to the argument that environmental spaces are identified through a process of scaling, it is suggested that such spaces in practical politics can be institutionalised as ‘environmental regions’. By way of a short note on the recent literature on the ‘Baltic Sea Region’, we shall to this end look at two attempts to conceptualise the regionality of environmental concerns. Like most traditional regional geography, these conceptions are both characterised by naturalism in their definition of regions and rely on an absolute understanding of space. This is clearly at odds with our understanding of environmental spaces as social productions. The argument is therefore turned to the ‘new’ regional geography, which promises a more dynamic understanding of regions. Drawing on the work of Paasi, it is in this respect suggested that environmental spaces can be institutionalised through a geohistorical process of regionalisation.

While the section on regionalisation rounds off our analysis of how the ‘environment’ is identified and institutionalised as political-geographical objects, the second section of this chapter closes the study with a discussion of the politics involved in the spatial objectification of environmental spaces. In the first place, this entails a short rearticulation of why environmental spaces are scaled into environmental enclosures, namely that such enclosures serve to situate environmental problems as objects for perception and, possibly, action. But the bulk of the section is consigned to the more profound suggestion that the spatial practices of scaling and possibly

regionalising environmental spaces produces ‘boundaries of inclusion’. This suggestion goes somewhat against the grain of most critical analysis of boundary-producing practices, and the suggestion is, it should be admitted, provisional.

6.1 Environmental Regionalisation

A large body of literature on regional dimensions of the Baltic Sea area has emerged over the past fifteen years. This literature is very diverse, but it is not wide off the mark to say that much of it revolves around notions of a regional Baltic Sea identity. Views and conclusions on this issue vary. Yet, we can take Lehti to speak for most of the critical-minded scholars when he concludes that

the Baltic Sea region of the post-Cold War era is void of exact definitions. It is above all a combination of several networks, each based on a different interpretation of the essence of the Baltic Sea area – what constitutes the region and how it should be developed (Lehti 1999: 435).

It is, in other words, not possible to speak of the ‘Baltic Sea Region’ as a fixed entity with a singular identity.

This conclusion, and the focus on (spatial) identity in the recent literature on the Baltic Sea Region, is well in line with the wider interest in identity politics that has taken hold in much of the social sciences, including human geography (Paasi 2003a). But questions about identity have also become a feature of practical politics in the Baltic Sea area. Here, as elsewhere, the line between abstract and practical concerns is a tender one. Many academics have thus played a practical role in ‘speaking’ the Baltic Sea Region into ‘existence’, and particularly the early contributions by political practitioners were often quite ‘abstract’; in the terms of critical geopolitics, we could say that the Baltic Sea Region is spatialised in both ‘formal’ and ‘practical’ geopolitical discourses (Section 2.3). Yet, if often from different positions, academics and practical political actors converge on identity questions such as: What (if anything) defines the Baltic Sea Region, and who belongs to it? What does a supposed Baltic Sea identity imply for the older Nordic identity, for example, and is it reconcilable with ‘national’ identities? And what is the identity of the Baltic Sea region in the wider political-geographic landscape of Europe? (For a cross-section of some contributions on these issues, see Joenniemi 1997.)

These kinds of questions are interesting and important, and we will at different points in this chapter encounter some of the literature that has addressed them. Yet the purpose of this study is not to discuss the regional identity of the Baltic Sea area as such, but to employ Baltic Sea environmental cooperation as a concrete context in which to investigate the spatialisation of environmental concerns. The Baltic Sea area is in this respect a helpful setting, not least because the regionalisation of environmental concerns here has a relatively long history; as Joenniemi and Stålvant note:

Baltic Sea regionalism emerged in the early 70's as a rational response to a shared concern. The basin and its commonly perceived environmental problems provided such an orientation with the necessary raw material. Later the contentious issue of an identity project prevailed, as its spiritual appeal won common recognition in a changing Europe. (Joenniemi and Stålvant 1995: 23)

Joenniemi and Stålvant in this way recognise two 'rounds' of regional integration in the Baltic Sea area: a pre-1989 round in which functional environmental cooperation was virtually the only factor promoting regionalisation across the cold war divide; and a second round of regional integration, which took off with the demise of the cold war and has come to involve a broad spectrum of identity, administrative and functional factors, including: 'Meaningful cooperation on environmental questions in the entire drainage basin' (Joenniemi and Stålvant 1995: 26).

Environment and Regions

Environmental themes have thus through the 1990s fused with a wide range of social issues in the Baltic Sea area, particularly issues relating to the restructuring of the former 'east' and the expansion of the European Union. We have in the previous chapter seen some indications of these developments, and the changing context of Baltic Sea environmental cooperation should be kept in mind. To set the stage for our discussion of 'environmental regions', however, we shall pause with two attempts to conceptualise such regions, which emerged when environmental cooperation still was a reasonably distinct issue in the Baltic Sea area: Westing's (1989) conception of the 'ecogeographical region' and Boczek's (1980) notion of the 'marine region'. The vigilant reader will quickly note that the arguments of Westing and Boczek are state-centric and instrumental. For Boczek, the marine region is thus a tool to systematise knowledge for intergovernmental environmental management, while the ecogeographical region for Westing is a means to foster 'comprehensive inter-governmental security'. But we shall focus on their conceptions of the 'region' in large-scale environmental politics, which are applied in analyses of the Baltic Sea area but are presented as general frameworks.

Westing's notion of the *ecogeographical region* draws heavily on a simplified version of ecosystem ecology (Section 1.2); for him, the term denotes

a geographical area that is united in an ecological sense, gaining its integrity from this cohesion. The concept of such an ecogeographical region is essentially that of an ecological system, or ecosystem; that is to say, a unit made up of living and non-living components of the environment that interact to form a life-support system. (Westing 1989: 2)

Westing recognises that an ecogeographical region is not 'fully self-contained' as it has 'numerous links with the rest of the world' and is 'a part of the global ecosystem (the biosphere)'. He acknowledges, in other words, the nested spatiality of ecosystems. Yet, although Westing concedes that the boundaries of an ecogeographical

region cannot be defined with absolute precision, he maintains that 'its approximate limits can be established with reasonable confidence'. Some clear examples of ecogeographical regions are

seas with their associated drainage basins (watersheds; catchment areas), major rivers with their associated drainage basins, major mountain ranges, major islands or peninsulas, insular aggregations, deserts, tundras, and permanently ice-covered areas. (Westing 1989: 2)

For Westing, the 'Baltic Sea ecosystem – the Sea plus its drainage basin' is thus a good example of an ecogeographical region. In contrast to these 'natural' ecogeographical regions, Westing evokes what he describes as 'socially determined regions' – regions defined by ethnic, linguistic, political and other social features. These regions and their subregions are 'more or less difficult to define, and some are less stable and less effective than others'. Yet the socially determined regions are seen as 'superimposed' upon the more stable ecogeographical regions, and 'they seldom coincide with their ecogeographical counterparts'. This is yet another way to articulate environmental interdependence as a tension between two notions of space, of course, which leads Westing to conclude:

It is precisely the lack of correspondence between ecogeographical regions and political regions, as well as the more ephemeral nature of the latter, that provides both the necessity for interstate cooperation and the challenge to bring it about. (Westing 1989: 3)

In this way, Westing makes a clear distinction between the regionality of respectively the 'natural' and 'social' spheres. Only in a rather nebulous aside, which borders dangerously on bioregionalism (Frenkel 1994), does Westing acknowledge a possible convergence between these spheres: 'If an ecogeographical region is inhabited,' he writes, 'the criteria that contribute to its definition should be extended to include basic agricultural and silvicultural self-sufficiency' (Westing 1989: 2).

The separation between the 'natural' and the 'social' is less marked in Boczek's conceptualisation of the 'marine region' for 'marine regionalism'; in fact, we might say that his approach has something of a regional synthesis to it. For Boczek, 'marine regionalism' implies 'the management of the sea and its resources at the regional level' (Boczek 1980: 196-7).¹ To this end Boczek contrives the 'marine region', which for him has three 'connotations'. First, the *geographical* marine region characterised as an expanse of water distinguished from other parts of the ocean by

1. It should be noted that Boczek employs the terms 'regionalism' and 'the regional level' in an understanding common to international relations studies. This is to say that 'region' connotes an area larger than a single state, usually but not necessarily (only) a grouping of states, which is linked by a degree of interdependence; 'regionalism' is the more or less formal and desired process that drives such regional interdependence. This kind of regionalism is particularly discussed in relation to economic integration (for an introduction, see Butler 1997). From a critical perspective, Dodds (1998) discusses intergovernmental environmental cooperation in the southern hemisphere (the Valdivia Group) in terms of 'regionalism' and even 'oceanic regionalism'. Unfortunately, Dodds does not address the regionality of this endeavour beyond some cursory remarks.

some distinctive feature or features. Second, the *functional* marine region defined by a 'man-nature' relationship, which may or may not conform to the limits of the geographical marine region, and is distinguished by a situation in which 'there exists for the coastal nations an identifiable management problem that can be handled as a discrete issue'. Finally, Boczek recognises the *institutional* region that may, and for him in theory should, correspond closely to the functional marine region as a site of one or more formal agreements to handle a certain management problem; in this sense, Boczek concludes, the marine region is an 'institutionalised functional region'. We might say, therefore, that Boczek recognises three regional spheres: the physical 'geographical' region, the political 'institutional' region, and the environmental 'functional' region as a mediating sphere between the former two. The boundaries of the 'geographical' region may not fit those of the 'functional' and 'institutional' regions. Yet, for Boczek the three connotations of the marine region clearly add up to a comprehensive scheme to describe the region of marine regionalism; at least, 'The Baltic Sea offers an excellent example of a marine region in its three connotations. Moreover, the marine regional developments in the Baltic Sea area represent a unique and pioneering instance of marine regionalism' (Boczek 1980: 198).

Considering the centrality of the 'region' in these conceptualisations, it is a little surprising that neither Westing nor Boczek has found way to geographers' extensive literature on the term.² Yet both conceptualisations have something in common with traditional regional geography. Even with the prefix 'traditional', regional geography is neither a singular nor a simple enterprise in the intellectual history of geography (Livingstone 1992). But it is beyond the scope and needs of this study to interrogate the details of this history. Rather, we shall only take note of two interrelated features of the conceptual schemes offered by Westing and Boczek, which also characterised much if not most traditional regional geography. This will pave the way for a short introduction to the 'new' regional geography, from which we may derive an alternative approach to conceptualise the 'environmental region'.

First, like for many traditional regional geographers before them, the 'region' is for Westing and Boczek an almost self-evident, bounded area. To be sure, for a classic regional geographer like Hartshorne, the determination of divisions between regions involved subjective judgment, and he recognised that 'The problem of dividing the world, or any part of it, into subdivisions in which to focus the study of areas is the most difficult problem of organization in regional geography' (Hartshorne 1939: 465). In part, this recognition reflects the neo-Kantian idealism, which Hartshorne incorporated into his regional geography by way of Alfred Hettner (Peet

2. As a small curiosity, however, we may note that Westing and Boczek both refer to Russett's *International regions and the international system: a study in political ecology* (1967), which by proxy has gained a place in the history of political geography: it was in a review of this book that Berry (1969) in a much-quoted aside described political geography as 'that moribund backwater'. In fact, Berry praised this strange book, which in its use of quantitative data and methods provided a model Berry advised political geographers to follow. (Among the variables tabulated by Russett were 'communism' and 'catholic culture'!) Much political geography was a 'moribund backwater' in the 1960s, but its rescue did not come from the 'quantitative revolution' (see Johnston 2001).

1998). But much traditional regional geography is in Pudup's analysis guided by a pervasive naturalism in the definition of regions and their boundaries: 'physical geographical objects', Pudup explains, 'are mistaken as the foci of analysis when the real foci are fundamentally human geographical processes' (Pudup 1988: 375).

Although extended to include more than just physical geographical objects, this kind of naturalist delineation of regions is very evident in Westing's ecogeographical region, which gains its cohesion from an ecosystem. But also Boczek's conception of the marine region is inclined towards naturalism. Boczek recognises that the boundaries of the 'functional' and 'institutional' connotations of the marine region not necessarily correspond with those of the physical 'geographical' region. Yet the boundaries of the 'geographical' marine region are clearly seen as determined by 'nature'. Moreover, the way Boczek applies the conceptual scheme to the Baltic Sea area suggests that the 'functional' and 'institutional' connotations of the marine region are seen as descriptive layers upon the same physical geographic foundation. Like traditional regional geographers, Boczek in effect 'assumes correspondence between human and physical geographical patterns in the form of chorographic "layers of analysis"'. (Pudup 1988: 375).

Second, this approach to the 'region' also reveals the conception of space at work in the 'lay' regional geographies of Westing and Boczek: like most traditional regional geographers, they intuitively apply an absolute understanding of space. This is to say that space (and thus also regions as bounded stretches of space) is treated as a 'thing-in-itself', as a passive 'container' or 'arena' in which objects exist and events take place (Simonsen 1999). Besides the lurking danger of naturalism noted above, this implies that space is treated as an unproblematic category to be differentiated through detailed description and synthesis: 'no universals need to be evolved,' Hartshorne wrote, 'other than the general law of geography that all its areas are unique' (Hartshorne 1939: 468).

The absolute understanding of space is probably the most commonsense understanding of 'geography', and Westing and Boczek are neither the first nor the last to adopt this understanding intuitively; in their book on 'regional security complexes', for example, Buzan and Wæver (2003) essentially apply a very traditional regional-geographic mode of reasoning. Regional descriptions like that can be interesting, but to understand spatial formations, traditional regional geographies are at the best useless, at the worst misleading. This is not just or even mainly because traditional regional geography is ideographic, descriptive of the particular, as proponents of a nomothetic approach to geography began to claim during the 'quantitative revolution' of the 1950s and 60s. Rather, the inadequacy of traditional regional geography can be summarised into two points: first, the absolute understanding of space is usually static, without history; second, like the relative understanding of space advanced by 'quantitative' geographers, it separates the spatial from the social, sometimes to the extent of environmental determinism. The reader is not altogether off the mark if he or she in traditional regional geography, and the schemes of

Westing and Boczek, hears a whisper of Spykman's geopolitical dictum that 'geography does not argue' but 'simply is' (Section 2.3).

To raise these points is to argue for a socio-spatial approach to regional formations. We have previously encountered socio-spatial theory in our discussion of scale and scaling (Section 4.2). This time, however, we shall reach a little further back in this rich and varied field, to the 'reconstructed' or 'new' regional geography that had its heydays during the 1980s. Stated a little bluntly, one might say that the rise of the new regional geography marks socio-spatial geographers' return to studies of geographical specificity after having spent the 1970s learning social theory. But this renewed concern for regional specificity is – in theory if not always in practice – radically different from the chorology of traditional regional geography. According to Gilbert's (1988) almost obligatory exposition, this new regional geography has produced three conceptualisations of the region. With roots in Marxist geography, the first sees the region as *a local response to capitalist processes*. The second draws on humanistic geography and approaches the region in terms of culture, as *a focus of identification*. These two conceptualisations can thus be seen as 'regional turns' in two main strands of the socio-spatial theory that emerged during the 1970s. In a sense, Gilbert's third conceptualisation of the region spans these very different notions of the spatiality of social life. Informed by Giddens' (1984) structuration theory, in particular, this branch in the new regional geography centres on system of power in society and views the region as *a medium for social interaction*.

This rendering of the new regional geography is surely a little too simple. At least, the merry-go-round of academic fads and fashions has disturbed the relative prevalence Gilbert recognises among the three conceptualisations. In her 1988 article, Gilbert thus judges the view of regions as responses to capitalist processes to be the most prominent in geography. Yet, with the rise of cultural geography and the more general 'cultural turn' in geography, it can well be argued that the understanding of regions as focusses for (cultural) identity has gained the upper hand; that is, of course, if cultural-turn geography can be seen to contribute towards *regional* geography (see MacLeod and Jones 2001: 674-5). But Gilbert's three conceptualisations of the region in the new regional geography will do for our purpose, and her summary of the common core in this diverse endeavour hits the point:

Traditionally concerned with the more straightforward relationship between people and the natural environment, regional geography is now analysing the more complex links that relate to nature through the action of society, seen either in political-economic and/or cultural terms. [...] The region under investigation of contemporary regional geographers is one of social relations, one of complex interaction between social actors in a material environment both affecting and affected by these social relations. (Gilbert 1988: 213-15)

If anything, the new regional geography is thus united in the adoption of a relational understanding of space, which, in spite of its many articulations, has a common denominator in the view that the spatial is embedded in the social and vice versa

(Section 4.2; Simonsen 1999). Also, as we shall see below, the new regional geography views the regions as a process of regionalisation rather than a static entity, and understands regional formations as specific articulations of wider forces.

Geographers renewed enthusiasm for the 'region' has slackened over the past decade or so. To be sure, some economic geographers and like-minded economists have maintained a sanctuary for the concept, for example, and the 'region' has also survived in political-geographic analyses of issues such as 'Europe of the regions'. Yet the 'region' has slipped from the forefront of conceptual debates in contemporary geography; it is suggestive, for example, that *Key Concepts in Geography* (2003) does not include a chapter on the 'region'. But I am not to argue for a renewal of the new regional geography. Rather, we shall simply seize the dynamic conceptualisation of the 'region' that emerged from the new regional geography as an expedient framework to address the institutionalisation of environmental spaces. More particularly, we shall turn to the work of Paasi, who, in the appreciation of MacLeod and Jones, 'has been the most active participant in the search to advance a reconstructed regional geography befitting the current era of social complexity and ever more porous territorial boundaries' (MacLeod and Jones 2001: 671).

Institutionalising Environmental Regions

Paasi's work on regions and regionalisation emerged as an important contribution to the conceptualisation of the region as a medium for social interaction (Paasi 1986), a point of departure from which he has elaborated in an impressive series of publications (e.g. Paasi 1991, 1996, 2003b). This has carried Paasi into many regions and territories of geographical and social thought. But at the core of his oeuvre is the notion that the region should be comprehended as a continuous geohistorical process of institutionalisation:

Institutionalisation is a sociospatial process in which a territorial unit emerges as part of the spatial structure of the society concerned, becomes established and identified in various spheres of social action and consciousness, and may eventually vanish or deinstitutionalise in regional transformation. (Paasi 1991: 243)

The region is thus comprehended as a dynamic category, as a 'complex synthesis or manifestation of objects, patterns, social practices and inherent power relations that are derived from simultaneous interaction between different levels of social processes' (Paasi 1996: 33). The region is, in other words, not a simple matter. But to make certain key dimensions of the institutionalisation 'visible', Paasi conceptualises four analytical 'stages' in the formation of regions: (1) the development of *territorial shape*; (2) the formation of *symbolic shape*; (3) the emergence of *institutional shape*; and (4) the *established role* or position of the region in the spatial structure and social consciousness of society.

It should be noted that these 'stages' for Paasi are analytical abstractions, which in practice are entirely or partly simultaneous. One could have wished that he had selected a term less imbued with sequential (if not developmental) connotations, and a recent rendering of his conceptual scheme, Paasi simply and prudently speaks of 'four abstractions' (Paasi 2003b). But this is a detail that does not distract from the value of Paasi's dynamic understanding of the region, and the usefulness of his four analytical dimensions to bring out the process through which regions are institutionalised. Paasi has developed this approach in relation to the complex issue of regional formation in the Finnish-Russian border area. Yet it is my contention that his understanding and approach can be reworked to the somewhat different question of 'environmental regions' – the institutionalisation of environmental spaces. We shall do this by way of recasting Paasi's four analytical dimensions of regionalisation.

(1) The term 'territory' should in my view be reserved for the kind of spatial strategies Sack (1986) terms 'territoriality', and we shall therefore in respect to the 'first' dimension of regionalisation speak of the *material shape* of an environmental region. (Territoriality can be a feature in the material shaping, of course, but it is not a distinctive feature of this dimension of regionalisation.) This material shaping involves local and localised physical, biological and social objects and relations, including localised social practices. Paasi (1991) notes the role of physical conditions in regionalisation, in particular when such are transformed into a 'landscape' with symbolic connotations. But in environmental regions, both physical and biological conditions are important in shaping the region materially, particularly through more or less desirable social practices. It could be argued, for example, that the Baltic Sea emerged as an environmental region when it was realised that social practices in a fairly distinct physical geography had undesired biological effects. In any case, the material shape accords the environmental region a measure of concrete boundedness.

(2) It is particularly in relation to the *symbolic shape* that an environmental region acquires reasonably distinct boundaries and emerges as a framework for regional experience. The symbolic shaping may follow many avenues, which in various ways can relate to, and draw upon, the other dimensions of regionalisation. Scientific reports, like the 1970 report of the ICES working group on the Baltic Sea pollution (Section 3.1), can in this respect be important. But an environmental region can also find symbolic shape through high-profile meetings and conferences, for example the 1990 Ronneby Conference (Section 5.2). Also, texts like the Helsinki Convention are elements in the symbolic shaping. Naming can similarly play a role. Simply by way of its name, the nongovernmental Coalition Clean Baltic is thus an element in the symbolic shaping of the Baltic Sea as an environmental region. Curiously, the intergovernmental cooperative venture is in the respect of little avail as it – like many similar undertakings – is known by the name of the city in which it was launched officially; the name Helsinki Convention/Commission may boost some Finn's 'pride in place', but it does not advance a Baltic Sea 'sense of space'. And this is in an important respect what the symbolic shaping of an environmental

region is about, namely to convey a sense of a distinct and reasonably bounded geographical space of social-environmental relations. This may happen through means such as texts, events and names, but visual representations are arguably the most powerful symbolic shaper in the regionalisation of environmental regions.

The image of the catchment area has thus during the 1990s become a powerful symbol in the regionalisation of Baltic Sea environmental cooperation. In part, the power of this image may relate to the epistemic status of visual representations in modern Western consciousness, the 'scopic regime' of modern 'Cartesian perspectivalism' (Jay 1988), a proposition on which Ó Tuathail (1996) bases much of his critical geopolitics.³ Yet the image of the catchment area may also derive its power from an additional source. In his discussion of the identity of the Baltic Sea Region, Lehti makes the ironic aside: 'The Baltic Sea area has even been defined as a *drainage* area, a feature the Helsinki Commission (HELCOM) has conceptualized and construed as an image of the Baltic world!' (Lehti 1999: 435). The drainage (or catchment) area is certainly in many respects an absurd, if not worrying, definition of the Baltic Sea Region. Østergaard (1998) is on shaky environmental-determinist grounds, for instance, when he evokes the 'water boundaries' of the catchment area to illustrate the possibility that Denmark is divided into at least two identity-regions: a western region with a 'North Sea identity' outside the catchment area, and an eastern region with a 'Baltic Sea identity' within. Yet Lehti fails to acknowledge that the catchment area is a meaningful – if, to some extent, symbolic – representation of the material object of the Helsinki Commission: the marine environment of the Baltic Sea. In this case, but possibly also in other, the image gains much of its symbolic power from the simple fact that it makes material sense!

We might say, then, that the material shape and the symbolic shape come together in the notion of an environmental enclosure; that is, of course, if an environmental enclosure is seen as a temporarily fixed scale, which is produced at the intersection of the material and the metaphorical (Chapter 4). This process of scaling environmental spaces into an enclosure is not restricted to the institutionalisation of environmental regions. But the production of an enclosure is central to such regionalising endeavours as it is the means by which an environmental space is identified as a geographical object for politics.

(3) It is in respect to the emergence of the *institutional shape* that we find the distinguishing feature in the regionalisation of environmental regions. To some extent, this dimension could concern institutions in the sense of the institutional perspective in international relations studies (Section 2.1). But in the institutionalisa-

3. For a congenial critique of Ó Tuathail's emphasis on vision, see, for example, Heffernan (2000). While acknowledging that Ó Tuathail has an important point in his conceptualisation of the 'geopolitical gaze', I share the criticism that one should make *too* much of the power of vision. In the words of Foucault, 'It would be wrong to say that the principle of visibility governs all technologies of power used since the nineteenth century [...] It is indeed the case that the gaze has had great importance among the techniques of power developed in the modern era, but, as I have said, it is far from being the only or even the principal system employed' (Foucault 1980: 148 and 155).

tion of an environmental region, the interesting point is not how an intergovernmental institution like the Helsinki Commission devises and maybe follows 'sets of implicit and explicit principles, norms, rules, and decision-making procedure' (Krasner 1982: 186). Rather, the point is that actors in and around more or less formal institutions like that slowly may internalise an environmental enclosure. As likely as not, this may happen through mundane, routinised practices: meetings, correspondence, publications, etc. Through such practices the region is not only reproduced, it may also acquire a 'supra-individual' identity. In part, this implies that individual actors are socialised into a regional community. But in relation to environmental regions, 'supra-individual' should also be seen to imply 'above individual issues': the institutionalised environmental region is not simply a practical means to address particular issues; rather, the 'region' takes on particular issues because they fall within its environmental enclosure and broadly defined scope, for example, in the words of the 1992 Helsinki Convention, 'to prevent and eliminate pollution in order to promote the ecological restoration of the Baltic Sea Area and the preservation of its ecological balance' (Section 5.3).

(4) This brings us to the 'final' dimension in the regionalisation of environmental regions, the *established role* or position of the region. This dimension, Paasi argues, 'is in fact a cross-section of the institutionalisation process in which the region is gradually shaped and reproduced during the transformation of society' (Paasi 1991: 247). To this, we should add that the environmental region also is shaped and reproduced in respect to transformations in society-environment relations. This implies that although an environmental region is particular, the region is neither static nor unique as it emerges, is transformed, and may eventually vanish in a wider context of social and social-environmental change. This 'wider' context may work in a multitude of dimensions and scales, but to round off, we may briefly recall some of the large-scale contextual influences in the institutionalisation of the Baltic Sea as an environmental region.

In relation to Baltic Sea environmental politics, we have thus seen particular regional articulations of what Tilly terms the 'two interdependent master processes' of the modern era: the evolving systems of sovereign states and worldwide capitalism (Tilly 1984: 147). From the inception, the ups and downs and the eventual demise of cold war politics has for example been a significant contextual influence in the regionalisation of Baltic Sea environmental cooperation. Wider economic influences were for long of little significance, but during the 1990s, the Baltic Sea has as an environmental region increasingly been caught up in the 'adjustment' of the former 'east' to the liberal marked economy. And at the junction of 'politics' and 'economy', we find the EU as a growing contextual influence in Baltic Sea environmental politics. But in environmental politics, these 'master process' should be supplemented with the evolving 'master narratives' on nature-society relations. In the development of Baltic Sea environmental politics we have seen, for example, how wider discourses (and possibly practices) associated with the Brundtland Commis-

sion in the late 1980s were assimilated into the regional context of the Helsinki Commission; the adoption of the 'precautionary principle' can be seen to epitomise this development. Such contextual influences all boil down to questions of power. And in a sense, it is a dimension on power in the spatialisation of environmental spaces which is the topic of the next section.

6.2 Environmental Boundaries of Inclusion

Jacobs (2000) notes that 'difference' has become the *shibboleth* of critical social inquiry, the password to distinguish those who can be admitted to the community of critical researchers. Therefore, it is hardly surprising that boundaries – for long the eccentric domain of mostly conservative geographers – in recent years have attracted both critical geographers and social researchers of other denominations. For a notion of difference must by definition entail a line on the ground or in our minds, a line that distinguishes between 'here' and 'there', 'us' and 'them'. And this will almost inevitably feed processes of exclusion. I have no quarrels with the important research into these questions. Yet, at risk of forfeiting my *shibboleth* to the community of critical researchers, I will end this study with a provisional suggestion that the politics of scaling and regionalising instances of environmental interdependence at heart is a practice of inclusion. (An early version of parts of the following argument has been published in Larsen 2003.)

To approach this issue we may briefly reach back to Chapter 4 and Hacking's (1999) question: the social construction of what? This question was previously raised to discuss the ontological status of environmental enclosures. It was in this respect argued that such enclosures are not socially 'constructed' but are socially *produced* through a process of scaling at the intersection between the metaphorical and the material. But this still implies that an environmental enclosure is not inevitable, that it is not (only) determined by 'nature'. In Hacking's more general analysis, this will usually prompt the constructionist-minded to implore that the *X* recognised as 'not inevitable' is bad as it is and, as a possible extension, that we would be much better off if *X* were done away with or radically transformed. But the chain of reasoning need not run that far, because 'One may realize that something, which seems inevitable in the present stage of things, was not inevitable, and yet is not a bad thing' (Hacking 1999: 7). At risk of overstating my argument, I will suggest that the scaling and possible regionalisation of environmental spaces are an example of this: the outcomes of these spatial practices, and the practices themselves, are not inherently 'bad'. This suggestion has two dimensions to it, the first is reasonably straightforward, the second is more profound. We may start with the first dimension, which is a short explication of a point made in our previous discussions of environmental enclosures.

An environmental enclosure is a temporarily fixed scale, which identifies an environmental space as a geographical object. An environmental enclosure is, in other words, the spatial companion to Hajer's 'discursive closure' (Section 4.1). If such discursive closures serves the task of defining environmental problems in the inter-discursive complexity of environmental debates, environmental enclosures situate problems in the scalar ambiguity of ecosystem thinking (Section 4.2). This production of enclosures is not confined to the corridors of power; for different ends, for sure, we may find this spatialising practice in the practical environmental geopolitics of statepersons and activists, and in the formal environmental geopolitics of problem-solving and critical scholars. In a general sense, the production of environmental enclosures is therefore not inherently 'bad' because such enclosures serve the important task of identifying environmental spaces for perception and, possibly, action. This argument has more than just a functionalist ring to it, and in political practices the process of scaling environmental spaces into enclosures *is* often functional. Yet we may avoid succumbing to functionalism if it is remembered and accentuated that environmental enclosures are not inevitable facts of 'nature', but are socially produced and therefore are liable to changes and challenges.

But the production of environmental enclosures is also not inherently 'bad' in a more profound sense. As a temporarily fixed scale, the production of environmental enclosures involves the production of more or less distinct boundaries, which may be institutionalised through a process of regionalisation. These 'environmental boundaries' are 'boundaries of inclusion' in these sense that they serve to establish an inclusive identity around particular environmental problems.

Now, it is not unusual that boundaries are produced as a means to establish inclusive socio-spatial identities. But whether intended or not, such identities will usually involve territorial narratives that have exclusion as its inevitable antipode (Newman and Paasi 1998). The EU is a prominent example of a drive for regional inclusion, which even in a positive reading is inseparable from a parallel process of exclusion – for example the image of 'fortress Europe' (e.g. Gamberale 1997). In the more local context of the Baltic Sea area, Wennersten (1999) similarly argues that the EU during the 1990s has articulated a 'politics of inclusion' towards the reestablished Baltic republics, but this has entailed an apparently unintended 'politics of exclusion' towards Russia and the Commonwealth of Independent States. These examples seem to authenticate the 'post-structuralist logic' that identities are constructed in systems of difference; Dalby argues, for example, that

the essential moment of geopolitical discourse is the division of space into 'our' place and 'their' place; its political function being to incorporate and regulate 'us' or 'the same' by distinguishing 'us' from 'them', the same from 'the other' [...] this ideological representation of identity and difference is a powerful discursive move widely used in many political situations. (Dalby 1991: 274)

This mode of reasoning can be traced back to Saussurian linguistics, which holds that the meaning of a signifier is not derived from the signified, but from its relation to and difference from other signifiers (Jørgensen and Phillips 2002). Meaning/identity is, in other words, constructed through difference. Translated to social relations, this understanding implies that notions of Self are derived from differences to the Other, or, for communities, that 'we' are constituted through 'our' differences to 'them'; in the words of Paasi, 'the Other is created as an external entity against which "we" and "our" identity is mobilized' (Paasi 1996: 12). In fact, Paasi points out, such dualistic structures of Othering have two dimensions: the social us/them and the geographical here/there. But both dichotomies establish boundaries, and have the exclusion of an Other as their inevitable consequence.

As noted in the opening of this section, I have sympathy for these arguments. Yet I will suggest that the environmental boundaries produced during the enclosure and possible regionalisation of an environmental space depart from the dualistic scheme of Othering in the sense that they do not demarcate against someone or something, or has such 'others' or 'other things' as their necessary antipode; they are boundaries of inclusion without overtly spatial and, possibly, social exclusion. This is neither to say that large-scale environmental politics is an easy ride of inclusion, nor to imply that environmental boundaries of inclusion are politically unproblematic. To address this issue, we may turn the concrete analysis of Baltic Sea environmental politics, and distinguish between respectively scalar and social inclusion.

First, we may recognise a tendency towards spatial or *scalar inclusion*. This dimension of inclusion is most directly related to the geopolitics of spatialising environmental spaces, and has been a central feature of the preceding chapters. In relation to Baltic Sea environmental cooperation, we have in this respect seen that the spatiality of this cooperative venture is not a given but has been 'negotiated' through instances of scaling. Initially, this process of scaling was halted in an environmental enclosure, which included the Kattegat but was confined to the international waters of the Baltic Sea (Chapter 3; Section 5.1). Subsequently, the practices of the Helsinki Commission and its partners broke this enclosure and upscaled the environmental space to include the entire catchment area of the Baltic Sea (Section 5.2 and 5.3). Actually, it can well be argued that a weighty environmental problem like eutrophication is best addressed in a smaller scale than the entire Baltic Sea. This point is for example made by Lundqvist and Loftsson (1993). Still, they recognise that

The view on the Baltic [Sea catchment area] as one unified ecological system has been propagated. It might well be that research design and results have not explicitly supported the view of a common problem, but through the interpretation of politicians, within the HELCOM and among the public, the Baltic Sea has largely been perceived as one region. (Lundqvist and Loftsson 1993: 144)

Lundqvist and Loftsson suggest, in other words, that a more inclusive scale than the in some respect environmentally 'necessary' has been advanced. Yet the image of the catchment area has throughout the 1990s been a strong, and still materially meaningful, representation of the spatiality of Baltic Sea environmental cooperation. Recently, however, the practices of the Helsinki Commission suggest that it may be about to break this enclosure and embark on yet another upscaling, this time to include, or be included in, a larger European environmental space (Section 5.3).

This development is to me a concrete example of a wider feature of environmental politics drawing on a notion of ecosystem thinking. Ecosystems are spatial entities, but they are not furnished with absolute boundaries. Rather, ecosystems can more or less scientifically be recognised as scales in an interrelated and interdependent system of nested ecosystems, which for some range from the microscopic to the global scale. Therefore, it can be argued that practical but also formal engagements with environmental politics have an almost 'natural' incentive to be spatially inclusive, to include ever more of those nested ecosystems of which a particular environmental space is an interrelated and interdependent part. In relation to some environmental concerns this incentive to scalar inclusion may by 'nature' cease at some regional scale. But many environmental debates have a tendency to swirl off to the all-inclusive global scale: Spaceship Earth, Global Village and, indeed, the Brundtland Commission's 'Our Earth is one' are some of the charged metaphors that have been attached to this end of the scalar ladder. Sachs seems to have a point, therefore, when he on the ecosystem concept notes: 'in scope, as well as in scale, it has an enormous power of inclusion' (Sachs 1992: 32).

Second, we might also identify a trend towards *social inclusion*. This dimension of inclusion is less clear-cut than that of scalar inclusion; to rephrase the above quotation from Sachs, one could say that the 'ecosystem' has great power of inclusion in respect to spatial scale, but that this power is less distinct when it comes to social scope. Still, although questions of social inclusion are not primary to this study, the analysis of Baltic Sea environmental cooperation may provide some indications, and we may in this respect distinguish between the 'social inclusion' of respectively territorial and non-territorial actors.

Starting with the *territorial actors*, mostly states, the picture is reasonably clear. In spite of, but also to some extent induced by, the distinct social, economic and political differences of the area, Baltic Sea environmental cooperation has thus from the outset included all the coastal states; in fact, List notes, the cooperative venture 'has withstood a marked deterioration of overall relations between East and West in the late 1970s and early 1980s without being affected' (List 1990: 101). Moreover, already the 1974 Helsinki Convention was fashioned as an open convention, meaning that it was 'open for accession to any other State interested in fulfilling the aims and purposes of this Convention'.⁴ No new states have so far sought accession to the con-

4. Article 26(1), 'Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974', signed in Helsinki, 22 March 1974. Reproduced as Annex 1 in Helsinki Commission (1994b).

vention; that is, of course, if the reestablished Baltic republics' accession to the 1992 Helsinki Convention is seen as part of a 'natural' succession to the Soviet Union. But the quasi-territorial EU has, as we have seen, been accepted as a contracting party. Nothing suggests, therefore, that environmental cooperation in the framework of the Helsinki Convention is anything but inclusive in respect to territorial actors. As a small and yet suggestive curiosity, we may in this respect note that the version of the 1992 Helsinki Convention circulated before the signing had (as it turned out unused) spaces for the signatures of the Czech and Slovak Federal Republic, Norway and Ukraine.⁵ This development is particular to Baltic Sea environmental cooperation, of course. Yet, in his otherwise critical analysis of the Valdivia Group for environmental cooperation in the southern hemisphere, Dodds concedes that it 'is unique in the sense that it has attracted a membership [of states] which spans the southern hemisphere' (Dodds 1998: 737). So, while Westing (1989) in my analysis is mistaken to devise his 'ecogeographical' region as a static, natural entity, he is probably prudent in turning to ecosystem thinking to establish 'unity' across state boundaries for wider 'comprehensive security'.

In Baltic Sea environmental cooperation, the picture is less sanguine when it comes to the inclusion of *non-territorial actors*. For a start, the Helsinki Commission is only open for full membership for states, the intergovernmental EU, and – as so far unrealised – 'other economic integration organizations'. That the latter types of organisations can achieve full membership suggests the extent to which Baltic Sea environmental cooperation from the early 1990s has been coupled to strategies of economic reforms (Hjorth 1994). Yet the cooperative venture has also included other types of actors. Intergovernmental organisations and research institutions have thus for long been active in the Helsinki Commission, not as full members but as observers with substantial opportunities to influence the work of the commission. But both industrial and environmental nongovernmental organisations have also been included. As we have seen (Section 5.3), the inclusion of activist nongovernmental organisations did not come easily and was met with suspicion by some member governments. During the preparation of the high-level 1990 Ronneby Conference (Section 5.2), for example, Chancellor Kohl of the FRG initially refused to participate if such organisations were permitted to speak at the opening session.⁶ A compromise was in this respect worked out, and nongovernmental organisations were from 1989 accepted as observers in the Helsinki Commission. To what extent nongovernmental

5. 'Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1992', Conference Document No. 4, Diplomatic Conference on the Protection of the Marine Environment of the Baltic Sea Area, Helsinki, 9 April 1992 (Archives of the Danish EPA). In the version published in Helsinki Commission (1994b) only (unused) spaces for signatures of the Czech and Slovak Republic and Norway appears.

6. 'Østersø-miljøkonferencen. Forberedende møde i Stockholm den 26.-27. April 1990', Danish Ministry of Foreign Affairs, report of 7 May 1990; '2. Forberedende møde vedrørende Østersøkonferencen i Gdansk 20.-21. juni 1990', Danish Ministry of Foreign Affairs, report of 25 June 1990 (Archives of the Danish EPA). On the uneasy relationship between governmental and nongovernmental actors in German environmental politics, see Pehle (1997).

organisations in fact have gained influence is difficult to tell. But the acceptance of activist organisations as 'lead parties' in the implementation of some components of the JCP suggests a measure of political inclusion (Section 5.2). Also, as a sign of what he sees as the emerging role of nongovernmental organisations, Greene (1998) argues that Greenpeace with some success has influenced the commission's work on the reduction chlorinated organic substances from the paper and pulp industry.

The process of social inclusion is thus somewhat ambiguous. Something suggests, however, that the tendency towards scalar inclusion is accompanied by a more uncertain trend towards social inclusion. In the most daring, and admittedly also most provisional, formulation, it could be argued that the production of environmental boundaries in the long run establishes an inclusive environmental 'we', which does not demarcate against someone or has an Other as its necessary antipode. Some may reciprocate that 'nature' (or the 'environment') enters this equation as the Other. This could be the case. But in situations of environmental geopolitics like that of the Baltic Sea area, 'nature' (and possibly future generations) may then be seen as a necessarily voiceless Other, which is embraced for reason of responsibility. Environmental geopolitics could thus be seen to function as an antithesis to 'normal' geopolitics, which, in the rendering of Dalby and Ó Tuathail (1996: 455), 'function to elide questions of responsibility for the Other'.

This sounds a little too sanctimonious to be true. But environmental geopolitics is often imbued with quasi-religious sentiments; recall, for example, the holistic metaphors Spaceship Earth, Global Village, 'Our Earth is one', or, indeed, 'The Baltic Sea – our common sea'. In fact, one could say that the practice of producing environmental boundaries is a little like the activities of missionaries: there is no finite boundary but the globe and anybody is apparently happily embraced. But just as one would be well advised to ask a missionary questions about the nature of the offered embrace, so should we question the character of the inclusion offered in the production of environmental boundaries – and spaces. The production of environmental boundaries may not be inherently 'bad', but that does not imply that this practice is inherently 'good'.

In the first place, we may thus ask whether the boundaries drawn in the enclosing of an environmental problem adequately represent the material problem they purport to identify; we may, in other words, ask whether the material and metaphorical dimensions in the scaling of political spaces add up, or whether the material and symbolic shapes in an environmental region make sense. In a small way, this was in effect what the Coalition Clean Baltic did when it superimposed an 'air catchment area' upon the more usual topographical catchment area (Figure 5.4). Following the suggestions by Neumann (1994) and Paasi (2003a), we may to this end ask how and why a bounded environmental enclosure is produced, and possibly regionalised. And we should also ask who is doing the production of boundaries and with what intentions they do so. Furthermore, we should ask with what legitimacy environmental boundaries are produced to identify and possibly institutionalise the 'environ-

ment' as a spatial object. This is particularly important if the producers claim to represent necessarily voiceless 'environments' and future generations; as O'Neill notes on deliberative institutions in environmental politics, 'The representation of nonhumans and future generations [...] is problematic. In the necessary absence of their authorisation, accountability, and presence, claims to speak on their behalf relies on epistemic claims, coupled with care' (O'Neill 2001: 483). Also, particularly in large-scale environmental politics, we should remember that both territorial and non-territorial actors must be held accountable to their actions – and claims of representation (Mason 2001).

Having outlined these questions, I must disappoint the reader that I will not try to answer them in relation to the politics of environmental cooperation in the Baltic Sea area. This is not because I lack the will or desire to probe the workings of power, far from it. Rather, my reluctance to answer these question is based on the conviction that power analyses should not be treated lightly. This requires a clarification, which also may serve as a closing remark.

If 'difference' is the *shibboleth* of critical social inquiry, as suggested in the opening of this section, 'power' is arguably the catchword for those inside. Yet, for all the talk of power I find a disconcerting tendency among many critical scholars to engage in what is best described as template power analyses; that is, on a feeble empirical basis, simply to recognise theoretically given forces of repression or exclusion vested in, say, epistemic, colonial, patriarchal, statist, possibly capitalist and certainly modern agents or (discursive) structures. One could argue, for instance, that the regionalisation of Baltic Sea environmental politics is a state-centred project powered by rationalist discourses on human-environmental relationships, which emerge from powerful 'western' institutions and stealthily subjugate the people of the former 'east' into marked-based growth-economy. This is a caricature, of course, but something like this could be the case. Yet to draw such conclusions requires that we not only try to answer questions like those suggest above, but carefully track the many ways of power, for example: the role of direct domination as well as modes of indirect non-decision making, the possible repression of 'real interests', the influence of structures distributing authority and resources, not to mention the possible operation of hegemonic discursive regimes (Clegg 1989; Thomsen 2000). As implied, an approach to questions like that must be theoretically informed. But answers can only be made from a kind of intensive and concrete research, which it is well beyond the scope of this study to conduct. In this respect I can only agree with Foucault when he, in an interview on power, declares: 'I'm an empiricist: I don't try to advance things without seeing whether they are applicable' (Foucault 1988b: 106).

Conclusions

The aim of this study has been to probe an aspect in the geopolitics of large-scale environmental politics, which has received little attention; that is, the question of how the 'environment' in situations of environmental interdependence is identified and institutionalised as a political-geographic object. Yet I have only scratched the surface of a potentially vast topic and it is therefore a little pretentious to describe this final part of the study as 'conclusions', particularly as the aim has been to explore rather than explain. Instead of unshakable conclusions, I will accordingly end on a more modest note by summarising the discussions and analyses of the study into five interrelated conceptual points – an explication, a suggestion, and three propositions.

Most straightforward, this study has from the outset sought to explicate that the notion of environmental interdependence involves a tension between two intensely geographical but radically different world-views: 'political spaces' of separateness associated with the geopolitical vision of a world divided into discrete territorial states, and 'environmental spaces' of interrelatedness found in the ecological view of the Earth as constituted by spatially nested ecosystems. Implicitly or explicitly, this spatial tension is simmering (or boiling) in most practical and abstract engagements with large-scale environmental politics.

From this explication, I have suggested a broadening of critical analyses of large-scale environmental politics. Critical scholars have for long questioned the territorial state as the appropriate political space to address many if not most environmental concerns; in fact, transboundary environmental issues are often seen to erode notions of discrete territorial sovereignty, and states are frequently recognised as a source of rather than solution to environmental concerns. The sometimes dogmatic rejection of *the* state and *the* Westphalian state-system by critical scholars can be tedious, if not a little worrying. Yet I have no quarrels with the search for less state-centric political space to address common concerns, and I share the determination of the critical scholarship to question what is usually taken for granted. Rather, I have suggested that critical analyses should be extended to the spatiality of large-scale environmental concerns. These environmental spaces are often taken for granted, even in critical analyses, but it is my contention that there is a geopolitics to their specification.

To put flesh on this suggestion, I have through a concrete analysis of practical environmental geopolitics in the Baltic Sea area sought to advance three propositions. As the aim has been to conceptualise the spatialisation of large-scale environmental politics, we shall here, somewhat against the grain of my view of how research should be conducted, summarise these propositions without reference to the concrete case.

First, and central to my line of reasoning, is the proposition that environmental spaces are identified through a political process of scaling. Over the second half of the twentieth century, a view of the 'environment' as composed of 'ecosystems' has been adopted by many scientists and has also gained force in a growing public of 'lay' ecologists. At its most basic, this ecological world-view stresses the interrelatedness and interdependence between the inanimate and the animate, including humans. But the interrelatedness and interdependence of ecosystem thinking also has a spatial dimension. Ecosystems are not distinct geographical entities but more or less recognisable scales in a system of nested ecosystems, which for some range from the microscopic to the global. Ecological scientists can probably devise convincing methods to delineate particular ecosystems, but they and more so the public of lay ecologists must negotiate the spatiality of particular environmental concerns within the scalar ambiguity of a range of nested ecosystems. Therefore, the study has proposed that practical but also formal engagements with environmental politics require the establishment of an 'environmental enclosure' – a temporarily fixed scale, which situates an environmental issue a geographical object for perception and, possibly, action. Such enclosures are not facts of nature, nor are they (necessarily) just social constructions. Rather, they are produced through a process of scaling in the intersection between the material reality and metaphorical representations. This implies that environmental enclosures can be challenged with respect to their practical adequacy and that they are subject to change.

Second, the study has proposed that environmental spaces in practical politics can be institutionalised as 'environmental regions'. Following the lead of the 'new' regional geography and Paasi, it has in this respect been argued that the environmental region should be seen as a dynamic socio-spatial entity, which for analytical purposes can be split into four dimensions: the *material shape* of local and localised physical, biological and social objects and relations, which accord the region some concrete boundedness; the *symbolic shape* that establishes a framework for experience of the region, for example by way of images, texts, events and names; the *institutional shape* through which the region gains a 'supra-individual' identity in relation to actors and issues, in large-scale environmental politics typically through routinised practices; and, finally, the region's *established role* – a continuously evolving cross-section of the first three dimensions, in which the region is reproduced and transformed within the larger spatiality of social and social-environmental relations and structures. This implies that all environmental regions are particular, but such regions are not unique as they emerge, are transformed, and may eventually vanish in the generality of social and social-environmental change.

Finally, and admittedly most provisional, I have proposed that the boundaries produced during the enclosure and possible regionalisation of environmental spaces are inclusive. These 'environmental boundaries' are 'boundaries of inclusion' in the sense that they establish an inclusive socio-spatial identity around environmental concerns. This proposition is particularly directed at what the study has termed

‘scalar inclusion’. As temporarily fixed scales in the range of nested ecosystems, environmental enclosures serve to identify particular environmental spaces, which may be institutionalised as environmental regions. But these bounded spaces are still parts of the wider range of spatially nested ecosystems. Therefore, it can be argued that engagements with environmental politics have an almost ‘natural’ incentive to be spatially inclusive, to include ever more of those ecosystems of which a particular environmental space is an interrelated and interdependent part. The question of ‘social inclusion’ is more ambiguous. But in the most daring formulation of my proposition, it could be argued that environmental boundaries establish an environmental ‘we’, which does demarcate against someone or something, or has such ‘others’ or ‘other things’ as their necessary antipode.

This does not imply that environmental boundaries are inherently ‘good’. At one level, we may thus question whether the boundaries drawn in the enclosure of an environmental issue adequately delineate the material problem they purport to identify. To this end, we may ask how and why a bounded environmental enclosure is produced. But we may also ask questions about who is doing the production, and with what intentions and legitimacy they do so. The practice of producing environmental boundaries of inclusion is, in other words, no less political than other boundary-producing practices. But a critical engagement with this type of boundaries may require that we reexamine the focus and conceptual armoury of current boundary studies. This is to say that we should not let us hypnotise of the socio-spatial politics of inclusion/exclusion but also address the possibly more subtle politics of socio-spatial inclusion. Large-scale environmental politics may be a setting in which to investigate such politics of inclusion.

Appendix

Translated Quotations

Page 20, In thinking of ...: Det förste som kommer upp i vår fantasi vid tanken på en fremmande makt, är utan tvivel en kartbild.

Page 76, As the delicate ...: Då den tyska ömsesidiga politiska situationen har uppnått den nuvarande fasen och särskilt då DDR, Polen och Sovjetunionen inte detog i Stockholms miljökonferens, anser Finlands regering att tiden nu är inne att framställa konkreta åtgärder på regeringsnivån för beskyddandet av Östersjön.

Page 77, In keeping with ...: I överensstemmelse med hidtidig praxis vedrørende Danmarks forhold til DDR mener udenrigsministeriet ikke, at en sådan regeringskonference kan afholdes med dansk deltagelse, førend Danmark officielt har anerkendt Østtyskland. Som påpeget fra finsk side synes mulighederne for en normalisering af forholdet til DDR imidlertid at ligge inden for en overskuelig fremtid. Udenrigsministeriet går derfor i princippet ind for afholdelse af en konference, således som det er blevet foreslået fra finsk side.

Page 77, One must simply ...: Man maa bare være klar over, at dette er yders marginalt i relation til hovedspørgsmaalene om Østersøens forurening og et positivt resultat paa dette omraade mere er egnet til at putte blaar i øjnene paa folk end noget væsentligt skridt i retning af forbedring af forholdene.

Page 77, completely subsidiary in ...: [De ovenfor nævnte tiltag er imidlertid] helt underordnet i spm. om Østersøens forurening i sammenligning med problemerne omkring forurening fra land, [dels – og formodentlig i mindre omfang – gennem atmosfæren, dels og navnlig ved udtømning fra land gennem vandløb og kloakker]

Page 77, a field where ...: [vi her har] et omraade, hvor internationale aftaler om bekæmpelse ikke kan forventes indenfor en overskuelig aarække at blive andet end smukke løfteparagraffer og hensigtsærklæringer. Fra dansk side er vi sikkert lige saa lidt som de øvrige Østersølande rede til at paatage os nogensomhelst internationale forpligtigelse før vi er langt længere fremme i løsningen af vore nationale kloak- og spildevandsproblemer.

Page 78, It was discussed ...: Man diskuterade vad begreppet Östersjön innefattar. Geografiskt sett hör Kattegatt [*sic.*] inte till Östersjön. Ytterligare konstaterades, att om man från danskt och svenskt håll så önskar kan Kattegat inneslutas i den kommande regleringen för Östersjön.

Page 78, desirable that Kattegat ...: [I denne forbindelse skal der gøres opmærksom på det] ønskelige i, at Kattegat omfattes af de regler, der måtte blive vedtaget om Østersøen, idet man kan frygte en betydelig belastning med affald af de farvande, som står i umiddelbar forbindelse med havområder, aftalen omfatter.

Page 82, Most important is ...: Vigtigst er – iflg. tysk opfattelse – spørgsmålet om, hvorvidt Østersøen bør betragtes som et 'special area' i henseende til den kommende IMCO-konference i London om havforurening via skibsfarten. Man ønsker derfor ikke alle aspekter af Østersøforureningen behandlet på det ekspertmøde, der skal finde sted i Helsingfors 28. maj – 2. juni d.å., men i første omgang kun det nævnte IMCO-aspekt, muligvis dog også problemet om et nærmere samarbejde mellem Østersøstaterne til bekæmpelse af olieforurening fra tankskibe.

Page 83, mostly creates national ...: [Beträffande förorening från land konstaterades att förorening via rörsystem] skapar närmast nationella problem.

Page 83, one will not ...: [Fra dansk side vil man imidlertid kunne gå vidt med hensyn til en konkretisering af de foranstaltninger, der bør iværksættes. Dette gælder i særlig grad foranstaltninger med henblik på at forhindre spredning af en række svært nedbrydelige organiske forbindelser og tunge metaller, mens] man ikke vil kunne støtte forslag om både biologisk og kemisk rensning af spildevand med henblik på fjernelse af næringssalte.

Page 91, because of the Soviet ...: [Artikel 4 er,] på grund af USSR's modstand mod at lade konventionen få anvendelse direkte på russisk område, [udformet på en sådan måde, at staterne i territorialfarvandet, der jo er egentligt konventionsområde i henhold til artikel 1, via national lovgivning skal gennemføre konventionens bestemmelser, medens de i de indre farvandsområder med forbehold af deres suveræne rettigheder, forpligtiger sig til at sikre, at formålet med konventionen overholdes i disse farvande.]

Page 127, The purpose of the conference...: Formålet med konferencen var at udnytte det forbedrede politiske klima mellem øst og vest til at stramme op omkring miljøsamarbejdet i Østersøen. [...] De syv Østersølande arbejder løbende på at udvikle og intensivere samarbejdet i den såkaldte Helsingforskommission, men arbejdet har hidtil været hæmmet af, at det har været vanskeligt at kontrollere, om de vedtagne anbefalinger efterleves i praksis i alle Østersø-landene. Hertil kommer at havmiljøets nærmest kriseagtige tilstand i visse dele af Østersøområdet har ført til, at især de nordiske lande har følt, at det var nødvendigt, at miljøsituationen i Østersøen blev taget op på politisk plan.

Page 128, The Eastern countries emphasised...: Østlandene fremhævede gang på gang behovet for overførsel af ressourcer og teknologi for at kunne leve op til ministererklæringens krav til reduktionsmålsætninger for forureningsudslip, anvendelse af renere teknologi, m.m.

References

- Agnew, J. (1994) The territorial trap: the geographical assumptions of international relations theory. *Review of International Political Economy*, 1(1), 53-80.
- (2002) *Making political geography*. London: Arnold.
- (2003) *Geopolitics: re-visioning world politics*. London: Routledge. Second edition.
- Agnew, J. and Corbridge, S. (1995) *Mastering space: hegemony, territory and international political economy*. London: Routledge.
- Allen, J. (2003) Power. In Agnew, Mitchell and Ó Tuathail (eds.) *A companion to political geography*. Oxford: Blackwell. 95-108.
- Allen, T.F.H. and Hoekstra, T.W. (1992) *Toward a unified ecology*. New York: Columbia University Press.
- Andersen, B.V. (1991) *Interdependens: en analyse af begrebets anvendelse i studiet af international politik*. Copenhagen: Politiske Studier.
- Andersen, M.S. (1997) Denmark: the shadow of the green majority. In Andersen and Liefferink (eds.) *European environmental policy: the pioneers*. Manchester: Manchester University Press. 251-286.
- Anderson, J. (1996) The shifting stage of politics: new medieval and postmodern territorialities? *Environment and Planning D: Society and Space*, 14(2), 133-153.
- Auer, M.R. and Nilenders, E. (2001) Verifying environmental cleanup: lessons from the Baltic Sea Joint Comprehensive Environmental Action Programme. *Environment and Planning C: Government and Policy*, 19(6), 881-901.
- Bartelson, J. (1995) *A genealogy of sovereignty*. Cambridge: Cambridge University Press.
- Bernstein, R.J. (1983) *Beyond objectivism and relativism: science, hermeneutics, and praxis*. Philadelphia: University of Pennsylvania Press.
- Berry, B.J.L. (1969) Review of Russett 'International regions and the international system'. *The Geographical Review*, 59(3), 450-451.
- Blacksell, M. (2000) Law of the sea. In Johnston et al. (eds.) *The dictionary of human geography*. Oxford: Blackwell. Fourth edition. 438-440.
- Boczek, B.A. (1978) International protection of the Baltic Sea against pollution: a study of marine regionalism. *American Journal of International Law*, 72(4), 782-814.
- (1980) The Baltic Sea: a study of marine regionalism. *German Yearbook of International Law*, 23, 196-230.
- Boehmer-Christiansen, S. (1984) Marine pollution control in Europe: regional approaches 1972-80. *Marine Policy*, 8(1), 44-55.
- Bramwell, A. (1989) *Ecology in the 20th century: a history*. New Haven: Yale University Press.
- Bredsdorff, N. (2002) *Diskurs og konstruktion: en samfundsvidenskabelig kritik af diskursanalyser og socialkonstruktivismen*. Frederiksberg: Forlaget Sociologi/Samfundslitteratur.
- Brenner, N. (1998) Global cities, glocal states: global city formation and state territorial restructuring in contemporary Europe. *Review of International Political Economy*, 5(1), 1-37.
- (2001) The limits to scale? Methodological reflections on scalar structuration. *Progress in Human Geography*, 25(4), 591-614.
- Brenton, T. (1994) *The greening of Machiavelli: the evolution of international environmental policies*. London: Royal Institute of International Affairs/Earthscan Publications.
- Bull, H. (1977) *The anarchical society: a study of order in world politics*. London: Macmillan.
- Burningham, K. and Cooper, G. (1999) Being constructive: social constructionism and the environment. *Sociology*, 33(2), 297-316.
- Burr, V. (1995) *An introduction to social constructionism*. London: Routledge.
- (1998) Overview: realism, relativism, social constructionism and discourse. In Parker (ed.) *Social constructionism, discourse and reality*. London: Sage Publications. 13-25.

- Butler, F. (1997) Regionalism and integration. In Baylis and Smith (eds.) *The globalization of world politics*. Oxford: Oxford University Press. 409-428.
- Buttel, F. and Taylor, P. (1994) Environmental sociology and global environmental change: a critical assessment. In Redclift and Benton (eds) *Social theory and the global environment*. London: Routledge. 228-255.
- Buttimer, A. (1993) *Geography and the human spirit*. Baltimore: The Johns Hopkins University Press.
- Buzan, B. (1991) *People, states and fear: an agenda for international security studies in the post-cold war era*. Hertfordshire: Harvester Wheatsheaf. Second edition.
- (1995) The level of analysis problem in international relations reconsidered. In Booth and Smith (eds.) *International relations theory today*. Cambridge: Polity Press. 198-216.
- Buzan, B. and Wæver, O. (2003) *Regions and powers: the structure of international security*. Cambridge: Cambridge University Press.
- Byers, B. (1991) Ecoregions, state sovereignty and conflict. *Bulletin of Peace Proposals*, 22(1), 65-76.
- Camilleri, J.A. and Falk, J. (1992) *The end of sovereignty? The politics of a shrinking and fragmenting world*. Aldershot: Edward Elgar.
- Carr, E.H. (1946/1981) *The twenty years' crisis, 1919-1939*. London: Macmillan. Second edition.
- Castree, N. (2003) The geopolitics of nature. In Agnew, Mitchell and Ó Tuathail (eds.) *A companion to political geography*. Oxford: Blackwell. 423-439.
- Certeau, M. de (1984) *The practices of everyday life*. Berkeley: University of California Press.
- Chouliaraki, L. and Fairclough, N. (1999) *Discourses in late modernity: rethinking critical discourse analysis*. Edinburgh: Edinburgh University Press.
- Clapham, C. (1999) Sovereignty and the third world state. In Jackson (ed.) *Sovereignty at the millennium*. Oxford: Blackwell. 100-115.
- Clark, I. (1989) *The hierarchy of states: reform and resistance in the international order*. Cambridge: Cambridge University Press.
- Clegg, S.R. (1989) *Frameworks of power*. London: Sage Publications.
- Collier, A. (1998) Language, practice and realism. In Parker (ed.) *Social constructionism: discourse and realism*. London: Sage Publications. 47-58.
- Collin, F. (1998) Socialkonstruktivisme og den sociale virkelighed. In Järvinen and Bartilsson (eds.) *Socialkonstruktivisme: bidrag til en kritisk diskussion*. Copenhagen: Hans Reitzels Forlag. 41-67.
- Collinge, C. (1999) Self-organisation of society by scale: a spatial reworking of regulation theory. *Environment and Planning D: Society and Space*, 17(5), 557-574.
- Conca, K. and Lipschutz, R.D. (1993) A tale of two forests. In Lipschutz and Conca (eds.) *The state and social power in global environmental politics*. New York: Columbia University Press. 1-18.
- Cosgrove, D. (1994) Contested global visions: One-World, Whole-Earth, and the Apollo space photographs. *Annals of the Association of American Geographers*, 84(2), 270-294.
- Cox, K.R. (1991) Comment: redefining 'territory'. *Political Geography Quarterly*, 10(1), 5-7.
- Cox, R.W. (1981) Social forces, states and world orders: beyond international relations theory. *Millennium: Journal of International Studies*, 10(2), 126-155.
- (1994) The crisis in world order and the challenge to international organization. *Cooperation and Conflict*, 29(2), 99-113.
- Dalby, S. (1991) Critical geopolitics: discourse, difference and dissent. *Environment and Planning D: Society and Space*, 9(3), 261-283.
- (1992) Ecopolitical discourses: 'environmental security' and political geography. *Progress in Human Geography*, 16(4), 503-522.
- (2002) *Environmental security*. Minneapolis: University of Minnesota Press.
- Dalby, S and Ó Tuathail, G. (1996) The critical geopolitics constellation – problematizing fusions of geographical knowledge and power. *Political geography*, 15(6/7), 451-456.
- Danish Encyclopaedia (2001) Østersøen. *Den Store Danske Encyklopædi*, volume 20. Copenhagen: Danmarks Nationalleksikon/Gyldendal. 556-558.
- Darst, R.G. (2001) *Smokestack diplomacy: cooperation and conflict in East-West environmental politics*. Cambridge, Mass.: The MIT Press.
- Davidson, B. (1992) *The black man's burden: Africa and the curse of the nation-state*. New York: Three Rivers Press.
- Delaney, D. and Leitner, H. (eds.) (1997) Special issue on scale. *Political Geography*, 16(2).

- Demeritt, D. (2001) The construction of global warming and the politics of science. *Annals of the Association of American Geographers*, 91(2), 307-337.
- (2002) What is the 'social construction of nature'? A typology and sympathetic critique. *Progress in Human Geography*, 26(6), 767-790.
- Diamond, J. (1998) *Guns, germs and steel: a short history of everybody for the last 13,000 years*. London: Vintage.
- Dixon, M. (1990) *Textbook on international law*. London: Blackstone Press Limited.
- Dobson, A. (2000) *Green political thought*. London: Routledge. Third edition.
- Dodds, K. (1998) The geopolitics of regionalism: the Valdivia Group and southern hemispheric environmental co-operation. *Third World Quarterly*, 19(4), 725-743.
- Doran, P. (1995) Earth, power, knowledge: towards a critical global environmental politics. In Linklater and Macmillan (eds.) *Boundaries in question*. London: Painter Publishers. 193-211.
- Driver, F. (1991) Political geography and state formation: disputed territory. *Progress in Human Geography*, 15(3), 268-280.
- Dryzek, J.S. (1997) *The politics of the earth: environmental discourses*. Oxford: Oxford University Press.
- Dunne, T. (1997a) Realism. In Baylis and Smith (eds.) *The globalization of world politics*. Oxford: Oxford University Press. 109-124.
- (1997b) Liberalism. In Baylis and Smith (eds.) *The globalization of world politics*. Oxford: Oxford University Press. 147-163.
- Ebbesson, J. (1996) 1992 Baltic Convention: transition or stand-still? In Hjorth (ed.) *Baltic environmental cooperation: a regime in transition*. Linköping: Water and Environmental Studies, Linköping University. 39-53.
- Eden, S. (1998) Environmental issues: knowledge, uncertainty and the environment. *Progress in Human Geography*, 22(3), 425-432.
- Ehlers, P. (1993) The Helsinki Convention, 1992: Improving the Baltic Sea environment. *The International Journal of Marine and Coastal Law*, 8(2), 191-243.
- Falandysz, J., Trozosinka, A., Szefer, P., Warzocha, J. and Draganik, B. (2000) The Baltic Sea, especially southern and eastern regions. In Sheppard (ed.) *Seas at the millennium: an environmental evaluation, volume I*. Oxford: Elsevier. 99-120.
- Falk, J. (1997) The critical realist tradition and the demystification of interstate power: E.H. Carr, Hedley Bull and Robert W. Cox. In Gill and Mittelman (eds.) *Innovation and transformation in international studies*. Cambridge: Cambridge University Press. 39-55.
- Fitzmaurice, M. (1992) *International legal problems of the environmental protection of the Baltic Sea*. Dordrecht: Martinus Nijhoff/Graham & Trotman
- Flyvbjerg, B. (2001) *Making social science matter: why social inquiry fails and how it can succeed again*. Cambridge: Cambridge University Press.
- Foucault, M. (1980) *Power/knowledge: selected interviews and other writings 1972-1977* (edited by C. Gordon). New York: Pantheon Books.
- (1988a) Practicing criticism. In Foucault, *Politics, philosophy, culture: interviews and other writings 1977-1984* (edited by L.D. Kritzman). New York: Routledge. 152-156.
- (1988b) On power. In Foucault, *Politics, philosophy, culture: interviews and other writings 1977-1984* (edited by L.D. Kritzman). New York: Routledge. 96-109.
- (1991) Governmentality. In Burchell, Gordon and Miller (eds.) *The Foucault effect: studies in governmentality*. London: Harvester Wheatsheaf. 87-104.
- Frenkel, S. (1994) Old theories in new places? Environmental determinism and bioregionalism. *Professional Geographer*, 46(3), 289-295.
- Friis, T.W. (2001) *Den nye nabo: DDRs forhold til Danmark 1949-1960*. Copenhagen: Selskabet til Forskning i Arbejderbevægelsens Historie.
- Gamberale, C. (1997) European citizenship and political identity. *Space & Polity*, 1(1), 37-59.
- Gandy, M. (1996) Crumbling land: the postmodernity debate and analysis of environmental problems. *Progress in Human Geography*, 20(1), 23-40.
- Gerber, J. (1997) Beyond dualism – the social construction of nature and the natural and social construction of human beings. *Progress in Human Geography*, 21(1), 1-17.
- Gilpin, R. (1987) *The political economy of international relations*. Princeton: Princeton University Press.

- Glacken, C.J. (1967) *Traces on the Rhodian shore: nature and culture in western thought from ancient times to the end of the eighteenth century*. Berkeley: University of California Press.
- Gibson, C., Ostrom, E. and Ahn, T.-K. (1998) *Scaling issues in the social sciences*. IHDP Working Paper 1. Bonn: International Human Dimensions Programme on Global Environmental Change. Available from: www.ihdp.uni-bonn.de.
- Giddens, A. (1984) *The constitution of society: outline of the theory of structuration*. Cambridge: Polity Press.
- (1985) *The nation-state and violence: volume two of a contemporary critique of historical materialism*. Cambridge: Polity Press.
- Gilbert, A. (1988) The new regional geography in English and French-speaking countries. *Progress in Human Geography*, 12(2), 208-228.
- Golley, F.B. (1993) *A history of the ecosystem concept in ecology: more than the sum of parts*. New Haven: Yale University Press.
- Gordon, C. (1980) Afterword. In Foucault, *Power/knowledge: selected interviews and other writings 1972-1977*, edited by Gordon. New York: Pantheon Books. 229-259.
- Greene, O. (1998) Implementation review and the Baltic Sea regime. In Victor, Raustiala and Skolnikoff (eds.) *The implementation and effectiveness of international environmental commitments*. Cambridge, Mass.: The MIT Press. 177-220.
- Gregen, K.J. (1995) Metaphor and monophony in the 20th-century psychology of emotions. *History of the Human Sciences*, 8(2), 1-23.
- Gregory, D. and Urry, J. (eds.) (1985) *Social relations and spatial structures*. London: Macmillan.
- Grove, R. (1990) The origins of environmentalism. *Nature*, vol. 345, 3 May 1990, 11-14.
- Haas, P.M. (1990) *Saving the Mediterranean: the politics of international environmental cooperation*. New York: Columbia University Press.
- (1993) Protecting the Baltic and North Seas. In Haas, Keohane and Levy (eds.) *Institutions for the Earth: sources of effective international environmental protection*. Cambridge, Mass.: The MIT Press. 133-181.
- Haas, P.M., Keohane, R.O. and Levy M.A. (eds.) (1993) *Institutions for the Earth: sources of effective international environmental protection*. Cambridge, Mass.: The MIT Press.
- Habermas, J. (1971) Knowledge and human interests: a general perspective. In Habermas, *Knowledge and human interests*. Boston: Beacon Press. 301-317.
- Hacking, I. (1999) *The social construction of what?* Cambridge, Mass.: Harvard University Press.
- Hagen, J.B. (1992) *An entangled bank: the origins of ecosystem ecology*. New Brunswick: Rutgers University Press.
- Hajer, M.A. (1995) *The politics of environmental discourse: ecological modernization and the policy process*. Oxford: Oxford University Press.
- Häkli, J. (1994) Territoriality and the rise of the modern state. *Fennia*, 172(1), 1-82.
- Hannigan, J.A. (1995) *Environmental sociology: a social constructionist perspective*. London: Routledge.
- Hardin, G. (1968) The tragedy of the commons. *Science*, vol. 162, 13 December 1968, 1243-1248.
- Harste, G. (1994) Statsdannelsernes territorialitet i Europa. In Tonboe (ed.) *Territorialitet: rumlige, historiske og kulturelle perspektiver*. Odense: Odense Universitetsforlag. 117-140.
- Hartshorne, R. (1939) *The nature of geography: a critical survey of current thought in the light of the past*. Lancaster, Pa.: Association of American Geographers.
- (1954) Political geography. In James and Jones (eds.) *American geography: inventions and prospects*. New York: Syracuse University Press. 167-225.
- Hasenclever, A., Mayer, P. and Rittberger, V. (1997) *Theories of international regimes*. Cambridge: Cambridge University Press.
- Hayward, P. (1984) Environmental protection: regional approaches. *Marine Policy*, 8(2), 106-119.
- Heffernan, M. (2000) Balancing visions: comments on Gearoid O'Tuathail's critical geopolitics. *Political Geography*, 19(3), 347-352.
- Helsinki Commission (1981) Report of the Interim Commission (IC) to the Baltic Marine Environment Protection Commission. *Baltic Sea Environment Proceedings*, no. 2. Helsinki: Helsinki Commission.

- (1984) Activities of the Commission 1983, including the fifth meeting of the Commission held in Helsinki 13-16 March 1984. *Baltic Sea Environment Proceedings*, no. 13. Helsinki: Helsinki Commission.
- (1993) The Baltic Sea Joint Comprehensive Environmental Action Programme. *Baltic Sea Environment Proceedings*, no. 48. Helsinki: Helsinki Commission.
- (1994a) 20 years of intergovernmental cooperation for the Baltic marine environment 1974-1994. Helsinki: Helsinki Commission.
- (1994b) Intergovernmental activities in the framework of the Helsinki Convention 1974-1994. *Baltic Sea Environment Proceedings*, no. 56. Helsinki: Helsinki Commission.
- (2001a) Environment of the Baltic Sea area 1994-1998. *Baltic Sea Environment Proceedings*, no. 82A. Helsinki: Helsinki Commission.
- (2001b) *Harmonization of HELCOM recommendations with EU directives and OSPAR decisions and recommendations*. Helsinki: Helsinki Commission.
- Herod, A. and Wright, M.W. (2002) Placing scale: an introduction. In Herod and Wright (eds.) *Geographies of power: placing scale*. Oxford: Blackwell. 1-14.
- Hjorth, R. (1992) *Building international institutions for environmental protection: the case of the Baltic Sea*. Linköping: Water and Environmental Studies, Linköping University.
- (1994) The Baltic Sea environmental cooperation: the role of epistemic communities and the politics of regime change. *Cooperation and Conflict*, 29(1), 11-31.
- (1996) Introduction. In Hjorth (ed.) *Baltic environmental cooperation: a regime in transition*. Linköping: Water and Environmental Studies, Linköping University. 1-20.
- Hobsbawm, E. (1962/1996) *The age of revolutions 1789-1848*. New York: Vintage Books.
- (1994) *The age of extremes: the short twentieth century 1914-1991*. London: Michael Joseph.
- Homer-Dixon, T.F. (1991) On the threshold: environmental changes as causes of acute conflicts. *International Security*, 16(2), 76-116.
- Hovden, E. (1999) As if nature doesn't matter: ecology, regime theory and international relations. *Environmental Politics*, 8(2), 50-74.
- ICES (International Council for the Exploration of the Sea) (1970) Report of the ICES working group on pollution in the Baltic Sea. *Cooperative Research Report*, Series A, No. 15.
- (1974) Research programmes for investigations of the Baltic as a natural resource with special reference to pollution problems. *Cooperative Research Report*, No. 42.
- Imber, M. (1988) International institutions and the common heritage of mankind: sea, space and polar regions. In Taylor and Groom (eds.) *International institutions at work*. New York: St. Martin's Press. 150-166.
- Jackson, R. (1990) *Quasi-states: sovereignty, international relations and the third world*. Cambridge: Cambridge University Press.
- (1999) Sovereignty in world politics: a glance at the conceptual and historical landscape. In Jackson (ed.) *Sovereignty at the millennium*. Oxford: Blackwell. 9-34.
- Jacobs, J.M. (2000) Editorial: Difference and its other. *Transactions of the Institute of British Geographers*, 25(4), 403-407.
- Jakobsen, S. (1999) International relations and global environmental change: review of the burgeoning literature on the environment. *Cooperation and Conflict*, 34(2), 205-236.
- James, A. (1999) The practice of sovereign statehood in contemporary international society. In Jackson (ed.) *Sovereignty at the millennium*. Oxford: Blackwell. 35-51.
- Jay, M. (1988) Scopic regimes of modernity. In Foster (ed.) *Vision and visibility*. Walsworth: Marce-line. 3-27.
- Joas, M. (1997) Finland: from local to global politics. In Andersen and Liefferink (eds.) *European environmental policy: the pioneers*. Manchester: Manchester University Press. 119-160.
- Joenniemi, P. (ed.) (1997) *Neo-nationalism or regionality: the restructuring of political space around the Baltic rim*. Stockholm: NordREFO.
- Joenniemi, P. and Stålvant C.-E. (1995) Baltic Sea politics: achievements and challenges. In Joenniemi and Stålvant (eds.) *Baltic Sea politics: achievements and challenges*. Stockholm and Copenhagen: The Nordic Council/The Nordic Council of Ministers. 9-53.
- Johnson, B. (1973) The Baltic. In Churchill, Simmonds and Welch (eds.) *New directions in the law of the sea: collected papers, volume III*. London/New York: The British Institute of International and Comparative Law/Oceana Publications. 209-218.

- Johnston, R.J. (1986) Four fixations and the quest for unity in geography. *Transactions of the Institute of British Geographers*, 11(4), 449-453.
- (1992) Laws, states and super-states: international law and the environment. *Applied Geography*, 12(3), 211-228.
- (1998) Fragmentation around a defended core: the territoriality of geography. *The Geographical Journal*, 164(2), 139-147.
- (2001) Out of the 'moribund backwater': territory and territoriality in political geography. *Political Geography*, 20(6), 677-693.
- Jonas, A.E.G. (1994) Editorial: The scale politics of spatiality. *Environment and Planning D: Society and Space*, 12(3), 257-264.
- Jørgensen, M.W. and Phillips, L.J. (2002) *Discourse analysis as theory and method*. London: Sage Publications.
- Kasperson, J.X. and Kasperson, R.E. (2001) Border crossing. In Linnerooth-Bayer, Löfstedt and Sjöstedt (eds.) *Transboundary risk management*. London: Earthscan Publication. 207-243.
- Kautsky, L. and Kautsky, N. (2000) The Baltic Sea, including Bothnian Sea and Bothnian Bay. In Sheppard (ed.) *Seas at the millennium: an environmental evaluation, volume I*. Oxford: Elsevier. 121-133.
- Keohane, R.O. (1988) International institutions: two approaches. *International Studies Quarterly*, 32(4), 379-396.
- Keohane, R.O. and Nye, J.S. (1987) Power and Interdependence revisited. *International Organization*, 41(4), 725-753.
- (2001) *Power and interdependence*. New York: Longman. Third edition.
- Keohane, R.O. and Ostrom, E. (eds.) (1995) *Local commons and global interdependence: heterogeneity and cooperation in two domains*. London: Sage.
- Keylor, W.R. (1992) *The twentieth century world: an international history*. New York: Oxford University Press. Second edition.
- Kindler, J. and Lintner, S.F. (1993) An action plan to clean up the Baltic. *Environment*, 35(8), 6-15 and 28-31.
- King, G., Keohane, R.O. and Verba, S. (1994) *Designing social inquiry: scientific inference in qualitative research*. Chichester: Princeton University Press.
- Kjellén, R. (1916) *Staten som livsform*. Stockholm: Hugo Gebers Förlag.
- Krasner, S.D. (1982) Structural causes and regime consequences: regimes as intervening variables. *International Organization*, 36(2), 185-205.
- Kronsel, A. (1997) Sweden: setting a good example. In Andersen and Liefferink (eds.) *European environmental policy: the pioneers*. Manchester: Manchester University Press. 40-80.
- Kuehls, T. (1996) *Beyond sovereign territory: the space of ecopolitics*. Minneapolis: University of Minnesota Press.
- Laclau, E. and Mouffe, C. (2001) *Hegemony and socialist strategy: towards a radical democratic politics*. London: Verso. Second edition.
- Laferrière, E. and Stoett, P.J. (1999) *International relations theory and ecological thought: towards a synthesis*. London: Routledge.
- Lane, J.-E. and Jensen, S.T. (1996) States and common pool resources. *Scandinavian Political Studies*, 19(2), 95-109.
- Larsen, H.G. (2003) Environmental boundaries of inclusion. In Berg and van Houtum (eds.) *Routing borders between territories, discourses and practices*. Aldershot: Ashgate. 99-118.
- Latour, B. (1989) Clothing the naked truth. In Lawson and Appignanesi (eds.) *Dismantling truth: reality in the post-modern world*. London: Palgrave-Macmillan. 101-126.
- Lehti, M. (1999) Sovereignty redefined: Baltic cooperation and the limits of national self-determination. *Cooperation and Conflict*, 34(4), 413-443.
- Leitner, H., Pavlik, C. and Sheppard, E. (2002) Networks, governance, and the politics of scale: inter-urban networks and the European Union. In Herod and Wright (eds.) *Geographies of power: placing scale*. Oxford: Blackwell. 274-303.
- Lidskog, R. (1998) Society, space and environment: towards a sociological re-conceptualisation of nature. *Scandinavian Housing & Planning Research*, 15(1), 19-35.
- Lindeman, R.L. (1942) The trophic-dynamic aspect of ecology. *Ecology*, 23(4), 399-417.

- List, M. (1990) Cleaning up the Baltic: a case study in East-West environmental cooperation. In Rittberger (ed.) *International regimes in East-West politics*. London: Pinter. 90-116.
- (1991) *Umweltschutz in zwei Meeren: Vergleich der internationalen Zusammenarbeit zum Schutz der Meeresumwelt in Nord- und Ostsee*. München: tuduv-Verlagsgesellschaft.
- Litfin, K.T. (1994) *Ozone discourses: science and politics in global environmental cooperation*. New York: Columbia University Press.
- (1997) Sovereignty in world ecopolitics. *Mershon International Studies Review*, 41(2), 167-204.
- (1999) Constructing environmental security and ecological interdependence. *Global Governance*, 5(3), 359-377.
- Livingstone, D.N. (1992) *The geographical tradition: episodes in the history of a contested enterprise*. Oxford: Blackwell.
- Lowenthal, D. (2000) Environmental history: from the conquest to the rescue of nature. In Murphy and Johnson (eds.) *Cultural encounters with the environment: enduring and evolving geographic themes*. Lanham: Rowman & Littlefield. 177-200.
- Luke, T.W. (2000) Towards a green geopolitics: politicizing ecology at the Worldwatch institute. In Dodds and Atkinson (eds.) *Geopolitical traditions: a century of geopolitical thought*. London: Routledge. 353-371.
- Lundqvist, J. and Loftsson, E. (1993) The Baltic – regional diversity affecting environmental negotiations. In Sjöstedt et al. (eds.) *International environmental negotiations*. Stockholm: The Swedish Institute of International Affairs. 143-151.
- Lundqvist, L.J. (1976) Saving the Baltic. *Scandinavian Review*, 64(4), 46-53.
- Lynch, M. (1998) Towards a constructivist genealogy of social constructivism. In Velody and Williams (eds.) *The politics of constructionism*. London: Sage Publications. 13-32.
- Mackinder, H.J. (1904) The geographical pivot of history. *The Geographical Journal*, 23(4), 421-444.
- MacLeod, G. and Jones M. (2001) Renewing the geography of regions. *Environment and Planning D: Society and Space*, 19(6), 669-695.
- Mann, M. (1986) *The sources of social power, volume I: a history from the beginning to A.D. 1760*. Cambridge: Cambridge University Press.
- (1993) *The sources of social power, volume II: the rise of classes and nation states 1760-1914*. Cambridge: Cambridge University Press.
- Mason, M. (2001) Transnational environmental obligations: locating new spaces of accountability in a post-Westphalian global order. *Transactions of the Institute of British Geographers*, 26(4), 407-429.
- Mathews, J.T. (1989) Redefining security. *Foreign Affairs*, 68(2), 162-177.
- Mayall, J. (1999) Sovereignty, nationalism, and self-determination. In Jackson (ed.) *Sovereignty at the millennium*. Oxford: Blackwell. 52-80.
- Meyer, J.W., Frank, D.J., Hironaka A., Schofer, E. and Tuma, N.B. (1997) The structuring of a world environmental regime, 1870-1990. *International Organization*, 51(4), 623-651.
- M'Gonigle, R.M. and Zacher, M.W. (1979) *Pollution, politics and international law: tankers at sea*. Berkeley: University of California Press.
- Mickwitz, P. (1998) *Implementation of key environmental principles: experiences from the protection of the Baltic Sea*. Copenhagen: Nordic Council of Ministers.
- Mitchell, B. (2002) *Resource and environmental management*. Harlow: Pearson. Second edition.
- Murphy, A.B. (1996) The sovereign state system as political-territorial ideal: historical and contemporary considerations. In Biersteker and Weber (eds.) *State sovereignty as social construct*. Cambridge: Cambridge University Press. 81-120.
- Neumann, I.B. (1994) A region-building approach to Norther Europe. *Review of International Studies*, 20(1), 53-74.
- (2000) Diskursens materialitet. *Dansk Sociologi*, 11(4), 27-46.
- Newman, D. and Paasi, A. (1998) Fences and neighbours in the postmodern world: boundary narratives in political geography. *Progress in Human Geography*, 22(2), 186-207.
- Nielsen, E.H. and Simonsen, K. (2003) Scaling from 'below': strategies, practices and urban spaces. *European Planning Studies*, 11(8), 911-927.
- Østergaard, U. (1998) Østersøen som en historisk region. In Christiansen and Thomsen (eds.) *Danmark i Østersøregionen*. Copenhagen: Danish Institute of International Affairs. 21-37.
- O'Neill (2001) Representing people, representing nature, representing the world. *Environment and Planning C: Government and Policy*, 19(4), 483-500.

- Ostrom, E. (1990) *Governing the commons: the evolution of institutions for collective action*. Cambridge: Cambridge University Press.
- Ó Tuathail, G. (1996) *Critical geopolitics: the politics of writing global space*. Minneapolis: University of Minnesota Press.
- (1999) Understanding critical geopolitics: geopolitics and risk society. *The Journal of Strategic Studies*, 22(2/3), 107-124.
- (2000) The postmodern geopolitical condition: states, statecraft, and security at the Millennium. *Annals of the Association of American Geographers*, 90(1), 166-178.
- (2002) Theorizing practical geopolitical reasoning: the case of United States' response to the war in Bosnia. *Political Geography*, 21(5), 601-628.
- Ó Tuathail, G. and Agnew, J. (1992) Geopolitics and discourse: practical geopolitical reasoning in American foreign policy. *Political Geography*, 11(2), 190-204.
- Paasi, A. (1986) The institutionalisation of regions: a theoretical framework for understanding the emergence of regions and the constitution of regional identity. *Fennia*, 164(1), 105-146.
- (1991) Deconstructing regions: notes on the scales of spatial life. *Environment and Planning A*, 23(2), 239-256.
- (1996) *Territories, boundaries and consciousness: the changing geographies of the Finnish-Russian border*. Chichester: John Wiley & Sons.
- (2000) Review of Dalby and Ó Tuathail (eds.) 'Rethinking geopolitics'. *Environment and Planning D: Society and Space*, 18(2), 282-284.
- (2003a) Region and place: regional identity in question. *Progress in Human Geography*, 27(4), 475-485.
- (2003b) Territory. In Agnew, Mitchell and Ó Tuathail (eds.) *A companion to political geography*. Oxford: Blackwell. 109-122.
- Paterson, M. (1999) Overview: interpreting trends in global environmental governance. *International Affairs*, 75(4), 793-802.
- Patomäki, H. and Wight, C. (2000) After postpositivism? The promises of critical realism. *International Studies Quarterly*, 44(2), 213-237.
- Pedersen, K. (1996) Naturen som diskursiv konstruktion. *Dansk Sociologi*, 7(2), 37-49.
- Peet, R. (1985) The social origins of environmental determinism. *Annals of the Association of American Geographers*, 75(3), 309-333.
- (1998) *Modern geographical thought*. Oxford: Blackwell.
- Pehle, H. (1997) Germany: domestic obstacles to an international forerunner. In Andersen and Liefferink (eds.) *European environmental policy: the pioneers*. Manchester: Manchester University Press. 161-209.
- Prescott, J.R.V. (1972) *Political geography*. London: Mathuen.
- Proctor, J.D. (1998) The social construction of nature: relativist accusations, pragmatist and critical realist responses. *Annals of the Association of American Geographers*, 88(3), 352-376.
- Pudup, M.B. (1988) Arguments within regional geography. *Progress in Human Geography*, 12(3), 369-390.
- Ratzel, F. (1896/1969) The laws of the spatial growth of states. In Kasperson and Minghi (eds.) *The structure of political geography*. Chicago: Aldine Publishing Co. 17-28.
- Regier, H.A. (1993) The notion of natural and cultural integrity. In Woodley, Kay and Francis (eds.) *Ecological integrity and the management of ecosystems*. Ottawa: St. Lucie Press. 3-18.
- Ringius, L. (1996) The environmental action plan approach: a milestone in pollution control in the Baltic Sea. In Hjorth (ed.) *Baltic environmental cooperation: a regime in transition*. Linköping: Water and Environmental Studies, Linköping University. 23-38.
- Robbins, P. (2003) Political ecology in political geography. *Political Geography*, 22(6), 641-645.
- Rosenau, P.M. (1992) *Post-modernism and the social sciences: insights, inroads, and intrusions*. Princeton: Princeton University Press.
- Ross, N., Eyles, J., Cole, D. and Iannantuono, A. (1997) The ecosystem health metaphor in science and policy. *The Canadian Geographer*, 41(2), 114-127.
- Rotkirch, H. (1984) Ten years of environmental co-operation in the Baltic Sea: an evaluation and a look ahead. *Aqua Fennica*, 14(1), 3-13.
- Ruggie, J.G. (1993) Territoriality and beyond: problematizing modernity in international relations. *International Organization*, 47(1), 139-174.

- Rytövuori, H. (1980) Structure of détente and ecological interdependence: cooperation in the Baltic Sea area for the protection of marine environment and living resources. *Cooperation and Conflict*, 15, 85-102.
- Sachs, W. (1992) Environment. In Sachs (ed.) *The development dictionary: a guide to knowledge as power*. London: Zed Books. 26-37.
- Sack, R.D. (1974) The spatial separatist theme in geography. *Economic Geography*, 50(1), 1-19.
- (1986) *Human territoriality*. Cambridge: Cambridge University Press.
- Sassen, S. (1996) *Losing control? Sovereignty in an age of globalization*. New York: Columbia University Press.
- Sayer, A. (1992) *Method in social science: a realist approach*. London: Routledge. Second edition.
- (2000) *Realism and social science*. London: Sage Publications.
- Schneider, S.H. (2001) A constructive deconstruction of deconstructionists: a response to Demeritt. *Annals of the Association of American Geographers*, 91(2), 338-344.
- Scott, R.W. (2001) *Institutions and organizations*. London: Sage. Second edition.
- Simonsen, K. (1996) What kind of space for what kind of social theory? *Progress in Human Geography*, 20(4), 494-512.
- (1999) Rum som social kategori. *Grus*, no. 58, 5-21.
- Singer, J.D. (1961) The level-of-analysis problem in international relations. In Knorr and Verba (eds.) *The international system: theoretical essays*. Princeton: Princeton University Press. 77-92.
- Smith, N. (1990) Afterword: the beginning of geography. In Smith, *Uneven development: nature, capital and the production of space*. Oxford: Blackwell. Second edition. 160-178.
- (1993) Homeless/global: scaling places. In Bird et al. (eds.) *Mapping the futures: local cultures, global change*. London: Routledge. 87-119.
- Smith, S. (1993) Environment on the periphery of international relations: an explanation. *Environmental Politics*, 2(4), 28-45.
- (1995) The self-images of a discipline: a genealogy of international relations theory. In Booth and Smith (eds.) *International relations theory today*. Cambridge: Polity Press. 1-37.
- (1997) New approaches to international theory. In Baylis and Smith (eds.) *The globalization of world politics*. Oxford: Oxford University Press. 165-190.
- Soper, K. (1996) Nature/'nature'. In Robertson et al. (eds.) *FutureNatural: nature, science, culture*. London: Routledge. 22-34.
- Sørensen, G. (1997) Suverænitæt: formel og faktisk. *Fokus*, no. 1/1997. Copenhagen: Danish Institute of International Affairs.
- Sprout, H. and Sprout, M. (1956) *Man-milieu relationship hypotheses in the context of international politics*. Princeton: Centre of International Studies, Princeton University.
- Spykman, N.J. (1938a) Geography and foreign policy I. *The American Political Science Review*, 32(1), 28-50.
- (1938b) Geography and foreign policy II. *The American Political Science Review*, 32(2), 213-236.
- Stærdahl, J. (2000) *Effektiviteten af international miljøregulering*. PhD thesis. Department of Environment, Technology and Social Studies, Roskilde University.
- Stålvant, C.-E. (1993) The role of the environment in the regionalization of the Baltic Sea area. In Sjöstedt et al. (eds.) *International environmental negotiations*. Stockholm: The Swedish Institute of International Affairs. 119-142.
- Steinberg, P.E. (1994) Comment: territory, territoriality and the new industrial geography. *Political Geography*, 13(1), 3-5.
- (1997) Political geography and the environment. *Journal of Geography*, 96(2), 113-118.
- (2001) *The social construction of the ocean*. Cambridge: Cambridge University Press.
- Stoddart, D.R. (1965) Geography and the ecological approach: the ecosystem as a geographic principle and method. *Geography*, 50(3), 242-251.
- Swyngedouw, E. (1997) Neither global nor local: 'glocalization' and the politics of scale. Cox (ed.) *Spaces of globalization: reasserting the power of the local*. New York: Guilford Press. 137-166.
- Tansley, A.G. (1935) The use and abuse of vegetational concepts and terms. *Ecology*, 16(3), 284-307.
- Taylor, P.J. (1982) A materialist framework for political geography. *Transactions of the Institute of British Geographers*, 7(1), 15-34.

- (1993) *Political geography: world-economy, nation-state and locality*. Harlow: Longman. Third edition.
- (1994) The state as container: territoriality in the modern world-system. *Progress in Human Geography*, 18(2), 151-162.
- (1995) Beyond containers: internationality, interstateness, interterritoriality. *Progress in Human Geography*, 19(1), 1-15.
- (1996) Review of Demko and Wood (eds.) 'Reordering the world: Geopolitical perspectives on the twenty-first century'. *Economic Geography*, 72(1), 87-89.
- Thomsen, J.P.F. (2000) *Magt og indflydelse*. Århus: Magtudredningen.
- Tilly, C. (1984) *Big structures, large processes, huge comparisons*. New York: Russell Sage Foundation.
- (1992) *Coercion, capital, and the European states, AD 990-1992*. Oxford: Blackwell. Second edition.
- Thrift, N., Driver, F. and Livingstone, D. (1995) Editorial: The geography of truth. *Environment and Planning D: Society and Space*, 13(1), 1-3.
- Underdal, A. (2002) One question, two answers. In Miles, Underdal, Andresen, Wettstad, Skjærseth, and Carlin, *Environmental regime effectiveness: confronting theory with evidence*. Cambridge, Mass.: The MIT Press. 3-45.
- Urry, J. (1999) *Sociology beyond societies: mobilities for the twenty-first century*. London: Routledge.
- VanDeveer, S.D. and Dabelko, G.D. (1999) Redefining security around the Baltic: environmental issues in regional context. *Global Governance*, 5(2), 221-249.
- Vesa, U.J. (1989) Political security in the Baltic region. In Westing (ed.) *Comprehensive security for the Baltic: an environmental approach*. London: Sage Publications. 35-45.
- Viotti, P.R. and Kauppi, M.V. (1993) *International relations theory: realism, pluralism, globalism*. New York: Macmillan. Second edition.
- Vogler, J. (1995) *The global commons: a regime analyses*. Chichester: John Wiley & Sons.
- (1996) Introduction: the environment in international relations – legacies and contentions. In Vogler and Imber (eds.) *The environment and international relations*. London: Routledge. 1-21.
- Wæver, O. (1996) The rise and fall of the inter-paradigm debate. In Smith, Booth and Zalewski (eds.) *International theory: positivism and beyond*. Cambridge: Cambridge University Press. 149-185.
- Walker, R.B.J. (1993) *Inside/outside: international relations as political theory*. Cambridge: Cambridge University Press.
- Wapner, P. (1995) Politics beyond the state: environmental activism and world civic politics. *World Politics*, 47(3), 311-340.
- Ward, V. (1998) Sovereignty and ecosystem management: clash of concepts and boundaries? In Litfin (ed.) *The greening of sovereignty in world politics*. Cambridge, Mass.: The MIT Press. 79-108.
- WCED (World Commission on Environment and Development) (1987) *Our common future*. Oxford: Oxford University Press.
- Weber, S. (1992) Reconsidering statehood: examining the sovereignty/intervention boundary. *Review of International Studies*, 18, 199-216.
- Weiss, T.G. and Chopra, J. (1995) Sovereignty under siege: from intervention to humanitarian space. In Lyons and Mastanduno (eds.) *Beyond Westphalia?* Baltimore: The Johns Hopkins University Press. 87-114.
- Wendt, A. (1992) Anarchy is what states make of it: the social construction of power politics. *International Organisation*, 46(2), 391-425.
- (1999) *Social theory of international politics*. Cambridge: Cambridge University Press.
- Wennersten, P. (1999) The politics of inclusion: the case of the Baltic states. *Cooperation and conflict*, 34(3), 272-296.
- Westing, A.H. (ed.) (1989) *Comprehensive security for the Baltic: an environmental approach*. London: Sage Publications.
- Wolf, A.T. (1995) *Hydropolitics along the Jordan River: scarce water and its impact on the Arab-Israeli conflict*. Tokyo: United Nations University Press.
- Worster, D. (1994) *Nature's economy: a history of ecological ideas*. Cambridge: Cambridge University Press. Second edition.
- Yeung, W.C.H. (1997) Critical realism and realist research in human geography: a method or a philosophy in search of a method? *Progress in Human Geography*, 21(1), 51-74.

- Young, O.R. (1994) *International governance: protecting the environment in a stateless society*. Ithaca: Cornell University Press.
- (1995) The problem of scale in human/environment relationship. In Keohane and Ostrom (eds.) *Local commons and global interdependence: heterogeneity and cooperation in two domains*. London: Sage Publications. 27-45.
- Yurdusev, A.N. (1993) 'Level of analysis' and 'unit of analysis': a case for distinction. *Millennium: Journal of International Studies*, 22(1), 77-88.
- Zürn, M. (1998) The rise of international environmental politics: a review of current research. *World Politics*, 50(4), 617-649.